VCLIC News and Happenings, Volume 7

Hi everyone, and welcome to the October edition of VCLIC News! We have a lot to talk about this month, so I'll get right into it (and of course, further information is detailed below): First, we are excited to share with you some fantastic upcoming speakers, including **Drs. Yaa Kumah-Crystal and Trent Rosenbloom**, who will be presenting on Telemedicine efforts at VUMC on **October 22nd**; **Dr. Thomas Reese**, an invited speaker from the University of Utah, who will speak about Design Thinking in clinical informatics on **November 3rd**; and **Drs. Lindsay Mayberry and Lyndsay Nelson**, who will speak about their work with mHealth to reach underserved communities on **November 10th**.

Dr. Lindsay Knake is our **Featured Member** this month, and we are thrilled for everyone to get to know her and her work a bit better! With help from **Madison Agee** of HealthIT and **Dr. Dara Mize**, who both drafted the below article, we are glad to share about the fantastic work the **Cupid and SECTRA Go-live** teams and affiliated VUMC staff did to get these systems up and running for our users.

We round out with some reminders about the **Clinical Informatics Resident Elective**, the **VDAWGs Program**, **Upcoming Conferences** and **Conference Deadlines**, more information about the **Epic XGM conference**, and a bit about **Epic's virtual training**, which has been extended through December 11th, 2020.

Last but not least are our many accomplishments, awards, presentations, and publications this month— with a special congratulations to **Dr. Kim Unertl** for her upcoming **induction into ACMI** and to several of our members who were made **Fellows of AMIA** this year!

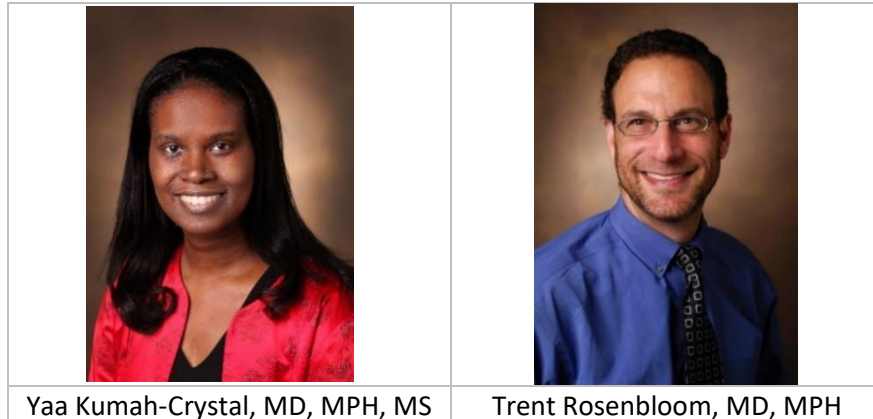We will be adding these accomplishments to the News and Publications pages of our website as well.

If you have any questions or would like to engage with our team, please email Elise (elise.russo@vumc.org).

Upcoming Lectures

"Telehealth: A Virtual Background (get it?!)"
October 22nd, 2020 at 12:00 pm Central

In conjunction with the DBMI Colloquium series, VCLIC is excited to have DBMI Faculty and VCLIC Member **Yaa Kumah-Crystal, MD, MPH, MS** present on her work related to increasing telehealth access and use for VUMC providers and patients. She will be joined by **Trent Rosenbloom, MD, MPH**, fellow DBMI Faculty member and one of this year's VCLIC Theme Champions!

| Yaa Kumah-Crystal, MD, MPH, MS | Trent Rosenbloom, MD, MPH |

The lecture will take place on **Thursday, October 22nd at 12:00 pm** (during the "usual" DBMI colloquium bloc).

Zoom link [here](#) (no registration required).

*Please note that this is the link the department has set up and sent out previously, so if you already have the invitation from Rischelle Jenkins on your calendar, you are all set!

"How design thinking can put theory into practice"
November 3rd, 2020 at 1:00 pm Central

On **Tuesday, November 3rd, 2020 at 1:00 pm**, we are thrilled to have **Thomas Reese, PharmD, PhD**, a researcher in the School of Medicine at the University of Utah and ambulatory care pharmacist in a clinic for underserved patients, present on designing information displays for critical care.
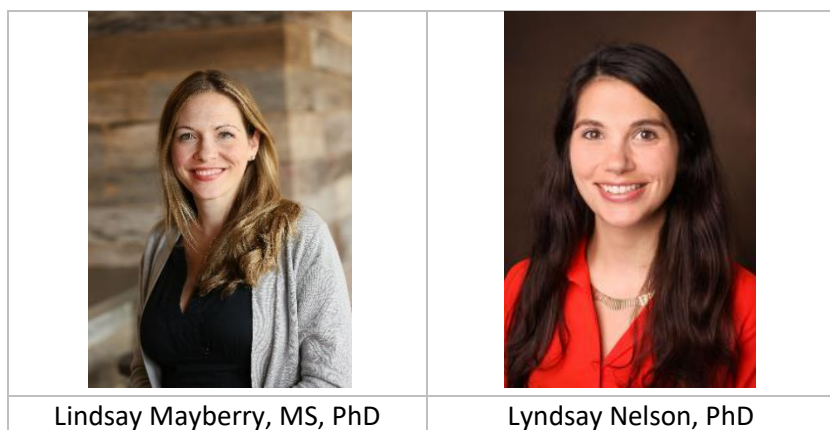
Please register for Dr. Reese's talk [here](#).

<p style="text-align:center;color:blue;">"Best practices for effective mHealth: how to reach, engage and improve outcomes in underrepresented groups"</p>

November 10th, 2020 at 1:00 pm Central

We are honored and excited to have **Lindsay Mayberry, MS, PhD** and **Lyndsay Nelson, PhD** present their phenomenal work on using text messages to engage patients, especially those who are underserved.

Please register for the webinar [here](#).

| Lindsay Mayberry, MS, PhD | Lyndsay Nelson, PhD |

Member Spotlight: Lindsey Knake, MD

I am currently a **Neonatology fellow** at the Monroe Carell Jr Children's Hospital at Vanderbilt, and I am also completing a **Master's degree in Biomedical Informatics**. Before moving to Nashville, I obtained my Biomedical Engineering degree and MD from the University of Iowa. I then completed my pediatric residency training at Baylor in Houston, Texas. However, my engineering roots brought me to Nashville because of the wonderful opportunity to pursue a degree in Biomedical Informatics during my fellowship training.

My current research interests include improving the usability of the EHR for both clinicians and researchers and implementing useful and timely clinical decision support algorithms. My master's thesis project is titled "**Implementation of Clinical Decision Support (CDS) for Neonatal Mechanical Ventilation**." I am working on additional projects, including using the synthetic derivative to study hearing loss risk factors for patients admitted to the NICU and administering a survey to clinicians about using social media as a form of CDS during Covid-19. I am so happy to be a part of VCLIC as I discovered many helpful resources to improve my CDS, my favorite being the Tableau dashboard to monitor my BPAs. I am thankful to be surrounded by so many inspiring DBMI colleagues who are all willing to support my research interests. I would be very happy to collaborate with any additional colleagues who are interested in improving CDS for ventilator management in their areas.

Outside of work, I enjoy spending time with my husband and dog by being active outdoors. We run, bike, and play sand volleyball and kickball. I miss seeing live music in Nashville, so I am looking forward to someday returning to outdoor country music concerts.

VDAWGs: Getting Access to Clarity

We had a brief article on the **Vanderbilt Database Access Working Group** (VDAWGs) in our initial newsletter, but now that we have two official VDAWG participants and are poised to have two more join within the month, we thought it might be helpful to point everyone to information on the process for gaining access to Epic's database, Clarity. We have a page in our Confluence Knowledgebase (you need to be on VUMC's network/on the VPN to access). The first step is to complete Epic training for the Clinical Data Model. Following completion of the training, there is a paperwork process through VCLIC that is detailed on the Confluence page linked above. If you have any questions, please reach out to elise.russo@vumc.org.

Cupid and SECTRA Arrive at VUMC on August 30

On August 30, a brand-new *e*Star module just for cardiology successfully went live at Vanderbilt. Accompanying **Cupid** was the first part of the **SECTRA** implementation, an enterprise-wide system for viewing and managing images. This first part of the SECTRA implementation was focused only on cardiology-related images.

Users of Cupid and SECTRA received some exciting benefits with the Go Lives, including:
- Consolidation of intraprocedural documentation by tech, nurse, and provider directly into *e*Star
- Structured data and reports available natively in *e*Star
- Electronic management of device inventory for outpatient cardiac monitoring
- Automatic data transfer of measurements from various systems (Hemo/Echo/Vascular/IDCO)
- Improvements to remote device check management program to improve care
- Improvements in reliability, performance, and efficiency for the user's imaging experience
- New, top-of-the-line diagnostic capabilities
- Increased number of additional imaging toolsets
- Enhanced workflows to support viewing images on mobile platforms

The coordinated Go Live on August 30 saw the creation and operation of numerous interconnected 24/7 Command Centers. These Command Centers prioritized user-reported issues, oversaw resources to solve these issues, deployed and managed support teams, and provided communication to end users. Notably, a great deal of this work was performed virtually, given the realities of social distancing in the

middle of the COVID-19 pandemic. Serving as Operational Command Center Incident Commanders overseeing these efforts were **Brent Moseng, MBA**, **Ian Jones, MD, Dara Mize, MD,** and **Sharidan Parr, MD, MSCI, MS**. They partnered closely with Technical Command Center Incident Commanders **Bobby Addison, BBA,** and **Byung Kang, BS, MS**. Their contributions, along with those from many other technical, clinical, and operational teams were instrumental in a successful Go Live of the two new systems.

On October 25, the implementation of SECTRA will be completed and it will become the official imaging system in use at the Medical Center, for all imaging studies conducted at VUMC. Along with the completion of the SECTRA rollout, the team will also launch Radiant, a radiology-specific *e*Star module.

Reminder about the Clinical Informatics Resident Elective

Drs. Dara Mize and Travis Osterman are pleased to announce the start of the **Clinical Informatics Resident Elective**, which is a two-week experience for physicians new to the field or for those who desire to solidify their knowledge in preparation for more advanced study. For more information, please see our [website](#) or email [Travis](#) or [Dara](#).

Upcoming Conferences and Conference Deadlines

- [SGIM](#): Submissions due by **October 26th, 2020**. In addition, you can [sign up](#) (by **October 26th** as well) to review abstracts, vignettes, innovations, or workshops during the review period (Nov 2-16), requiring 1-2 hours of work.
- [AMIA Annual Symposium 2020](#): Virtual conference will take place from **November 14th-18th, 2020**
- [SAIL](#): Virtual Presymposium **October 21st, 2020**
- [IHI Forum](#): Virtual conference **December 6th-9th, 2020**
- [NeurIPS](#): Virtual Conference **December 6th-12th, 2020**
- [Epic XGM](#): Presentation submissions due by **December 10th, 2020**
- [AMIA CIC](#): Submissions due by **December 1st, 2020**
- [ACC](#): Submissions due by **December 2nd, 2020** (1:00 pm ET)

More information on upcoming conferences and conference deadlines can be found on our Confluence page, [here](#).

Epic XGM 2021 Accepting Abstracts for Presentation

As noted in the brief bullet above, **Epic's Expert Group Meeting (XGM)** is now accepting presentation submissions. Please visit [their website](#) to submit your presentation ideas. **The call for presentations closes December 10, 2020 at midnight, and the conference will be April 26th-May 7th, 2021 (Epic has not yet decided whether it will be in-person or virtual).**

XGM is Epic's annual conference where application developers and other IT-focused roles explore the known and unknown in the worlds of software build, training, performance, and workflow. App-based and role-focused sessions are designed to probe universal truths that you can put to use back at VUMC.

Reminder about Epic Virtual Training

Epic has a variety of **training and certification programs** (Epic Training Resources) that may be of interest to VCLIC members, some of which we list on our Confluence site. Epic has always required travel to Verona, WI to complete trainings. Although Verona is lovely (especially in warmer months!) this travel requirement has sometimes been a barrier to completing training. Since COVID-19, Epic has temporarily started offering trainings remotely, through December 11, 2020.

This virtual option may be your chance to complete certifications like Physician Builder, Clinical Content Builder, Physician Builder Analytics, Chronicles Programmer, Research Informatics, or Cogito Clarity Clinical Data Model without needing to travel. In person training continues to be offered, so if you'd rather learn in person, you can still travel to Verona and take a course on Epic's campus, with enhanced cleaning and safety protocols.

Publications, Presentations, Interviews, and Awards

ACMI Fellow

Congratulations to **Kim Unertl, PhD**, who will be inducted into the **American College of Medical Informatics (ACMI)** during the AMIA 2020 Annual Symposium this November. There were only 13 new fellows, making this an especially impressive achievement!

Kim Unertl, PhD

FAMIA Awardees

We also congratulate the 8 VCLIC Members who will be inducted as **Fellows of AMIA (FAMIA)** during the 2021 AMIA Clinical Informatics Conference (CIC). Great job representing VUMC and VCLIC!

Martin Were, MD, MS	Scott Nelson, PharmD, MS	Laurie Novak, PhD, MHSA
Josh Peterson, MD, MPH, FACMI	Colin Walsh, MD, MA	Trent Rosenbloom, MD, MPH, FACMI
Asli Weitkamp, PhD		Kevin Johnson, MD, MS

We would also like to congratulate the 3 VCLIC Members who were inducted into the **FAMIA Class of 2020 earlier this year**. Great job!

Dara Mize, MD	Travis Osterman, DO, MS	Jon Wanderer, MD, MPhil

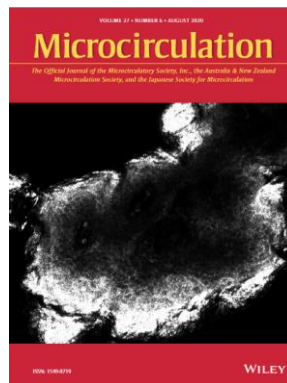## Other Accomplishments

Additionally, we would like to highlight **Scott Nelson, PharmD, MS**' achievement of completing 5 Epic Trainings. Congratulations, Scott—we know this took a lot of time and effort!

- Cogito Certified
- Caboodle Certified
- Clarity Data Model Certified
- Clinical Data Model Certified
- Cognitive Computing Badge

In addition, **Eric Tkaczyk's, MD, PhD, FAAD**, team (VDTRC) landed the most recent cover article in *Microcirculation,* for their article "Individual cell motion in healthy human skin microvasculature by reflectance confocal video microscopy." Way to go!

In The News

As seen in the *VUMC Reporter:*

- Initiative seeks to extract cancer phenotypes from electronic health records (**Jeremy Warner, MD, MS, FAMIA, FASCO**)
- Racial Equity Task Force members named (**Derek Williams, MD, MPH**)
- Computer-based study reveals impact of race on health
    - Since our VCLIC Focus Area for 2020-21 is "Making Health Care More Equitable through Technology, we were excited to see the *VUMC Reporter's* article on this subject!

Additionally....

Patty Sengstack, DNP, RN, and **Karen Hughart, MSN, BN** were highlighted in an article in *Computers, Informatics, Nursing (CIN)* for their effort in sharing information during COVID-19, which was much needed at the beginning of the outbreak. Their video interview in April led to a series of 12 videos with other health systems and medical centers across the country.

Patty Sengstack, DNP, RN also authored an ANIA Position Statement which was just released in September, regarding the burden of EHR documentation. She has been leading a group of Nursing Informatics leaders across the nation on this effort. Congrats on a fantastic accomplishment!

Yaa Kumah-Crystal, **MD, MPH, MS; Kevin Johnson**, **MD, MS;** and Josh Denny (MD, MS, FACMI), were featured in Episode 7: "The Genome Files: How #bigdata Tailors Treatment," in the *Vanderbilt Health DNA* Podcast. This episode explores how big data can be used in precision medicine, how new technology can help providers, and more. What a cool episode!

Accepted Presentations

Congratulations to **Jon Wanderer, MD** for his presentations at the American Society of Anesthesiology Annual Meeting earlier this October!

Spradling C, Dwan R, **Wanderer JP**, Chestnut D, Bauchat J. Rapid Identification Of Known Difficult Airway Is Critical For Successful Management Of Obstetric Emergencies In Morbidly Obese Women. *American Society of Anesthesiology Annual Meeting*. 2020.

Wanderer JP. Practical Considerations for Machine Learning Implementation. *American Society of Anesthesiology Annual Meeting.* 2020.

Wanderer JP. Harnessing the Power of Performance Measurement to Improve Perioperative Outcomes [Accepted but not presented due to COVID restrictions]. *American Society of Anesthesiology Annual Meeting.* 2020.

Recently Published

October 2020

Antoon JW, Hall M, Herndon A, Carroll A, Ngo M-l, Freundlich KL, Stassun JC, Frost P**, Johnson DP**, Chokshi SB, Brown CM, Browning WL, Feinstein JA, Grijalva CG, **Williams DJ**. Prevalence of Clinically Significant Drug-Drug Interactions Across US Children's Hospitals. *Pediatrics.* 2020;156(4).

Bakouny Z, Hawley JE, Choueiri TK, Peters S, Rini BI, **Warner JL**, Painter CA. COVID-19 and Cancer: Current Challenges and Perspectives. *Cancer Cell.* 2020.

Carroll AR, **Johnson DP**. Know It When You See It: Identifying and Using Special Cause Variation for Quality Improvement. *Hospital Pediatrics.* 2020.

Heiser CN, Wang VM, Chen B, **Hughey JJ**, Lau KS. Automated quality control and cell identification of droplet-based single-cell data using dropkick. *bioRxiv*. 2020.

Huang H, Wang S, Scheufele E, Dankwa-Mullan I, **Jackson GP**, Arriaga YE. Early-onset colorectal cancer in younger patients: A population-based study. *Journal of Clinical Oncology.* 2020;38(29 Suppl):124.

Kuderer NM, Wulff-Burchfield E, Rubinstein SM, Grivas P, **Warner JL**. Cancer and COVID-19: Authors' reply. *The Lancet.* 2020;396(10257):1067-68.

Li G, **Wanderer JP**, **Freundlich RE**. Pulmonary Outcomes and Sugammadex versus Neostigmine: Comment. *Anesthesiology.* 2020.

Lipsett SC, Hall M, Ambroggio L, Hersh AL, Shah SS, Brogan TV, Gerber JS, **Williams DJ**, Grijalva CG, Blaschke AJ, Neuman MI. Antibiotic Choice and Clinical Outcomes in Ambulatory Children with Community-Acquired Pneumonia. *The Journal of Pediatrics.* 2020.

Markham JL, Thurm CW, Hall M, Shah SS, Quinonez R, Tchou MJ, Antoon JW, Genies MC, Parlar-Chun R, **Johnson DP,** Shah SP, Ittel M, Brady PW. Variation in Early Inflammatory Marker Testing for Infection-Related Hospitalizations in Children. *Hospital Pediatrics.* 2020;10(10):851-58.

McDonald WS, Wagner JK, Deverka PA, Woods LA, **Peterson JF**, Williams MS. Genetic testing and employer-sponsored wellness programs: An overview of current vendors, products, and practices. *Molecular Genetics & Genomic Medicine.* 2020;8(10):e1414.

Naderi H, **Madani S**, Kiani B, Etminani K. Similarity of medical concepts in question and answering of health communities. *Health Informatics Journal*. 2020;26(2):1443-54.

Rubinstein SM, **Warner JL**. COVID-19 and haematological malignancy: navigating a narrow strait. *The Lancet Haematology.* 2020;7(10):e701-e03.

Schoenbachler JL, **Hughey JJ**. pmparser and PMDB: resources for large-scale, open studies of the biomedical literature. *bioRxiv.* 2020.

Tang Y, Gao R, Lee HH, Wells QS, **Spann A**, Terry JG, Carr JJ, Huo Y, Bao S, Landman BA. Prediction of Type II Diabetes Onset with Computed Tomography and Electronic Medical Records (Conference Paper). *Multimodal Learning for Clinical Decision Support* and *Clinical Image-Based Procedures*. 2020.

Wanderer JP, Nathan N. Decoding Little Squiggles from Little People: EEG Monitoring for Pediatrics. *Anesthesia & Analgesia*. 2020;131(4).

Wanderer JP, Rathmell JP. Cuff vs Cuff: Does A New Blood Pressure Device Measure Up? *Anesthesiology.* 2020;133(5):A23.

Wanderer JP, Rathmell JP. Ventilators vs. Robots: Optimizing for Obese PEEPle. *Anesthesiology.* 2020;133(4):A25.

Wang S, Huang H, Scheufele E, Arriaga YE, **Jackson GP**, Dankwa-Mullan I. Factors associated with time to targeted therapy for patients with metastatic lung cancer with driver mutations. *Journal of Clinical Oncology.* 2020;38(29 Suppl):120.

Yen P-Y, Lehmann LS, Snyder J, Schnock K, Couture B, Smith A, Pearl N, Gershanik E, **Martinez W**, Dykes PC, Bates DW, Rossetti SC. Development and Validation of WeCares, a Survey Instrument to Assess Hospitalized Patients' and Family Members' "Willingness to Engage in Your Care and Safety". *The Joint Commission Journal on Quality and Patient Safety.* 2020;46(10):565-72.

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Arriaga Y, Huang H, Wang S, Scheufele E, Rhee K**, Jackson G**, Mullan ID. Abstract 496P Factors associated with colorectal cancer in patients 18 to 50 years old in the United States. *Annals of Oncology.* 2020;31(4): p. S451.

Chapurin N, Totten DJ, Morse JC, Khurram MS, **Louis PC**, Sinard RJ, Chowdhury NI. Treatment of Sinonasal Teratocarcinosarcoma: A Systematic Review and Survival Analysis. *American Journal of Rhinology & Allergy.* 2020.

Freeman P, Couperus K, Walsh R, **Ward MJ**, McNaughton CD, Bothwell J. "Your Finger or Mine?"— Patient Preferences in the Collection of Fecal Occult Blood Testing in the Emergency Department. *Military Medicine.* 2020;185(9-10):e1393-e96.

Hong JY, Ivory CH, VanHouten CB, Simpson CL, **Novak LL**. Disappearing expertise in clinical automation: Barcode medication administration and nurse autonomy. *JAMIA*. 2020.

Jazieh AR, Chan SL, Curigliano G, Dickson N, Eaton V, Garcia-Foncillas J, Gilmore T, Horn L, Kerr DJ, Lee J, Mathias C, Nogueira-Rodrigues A, Pierce L, Rogado A, Schilsky RL, Soria J-C, **Warner JL**, Yoshida

K. Delivering Cancer Care During the COVID-19 Pandemic: Recommendations and Lessons Learned From ASCO Global Webinars. *JCO Global Oncology.* 2020(6):1461-71.

Lewis JA, Spalluto LB, Henschke CI, Yankelevitz DF, Aguayo SM, Morales P, Avila R, Audet CM, Prusaczyk B, Lindsell CJ, Callaway-Lane C, Dittus RS, Vogus TJ, Massion PP, Limper HM, **Kripalani S**, Moghanaki D, CL R. Protocol to Evaluate the Implementation of an Enterprise-Wide Initiative to Increase Access to Lung Cancer Screening in the Veterans Health Administration (preprint). 2020.

Novak LL, George S, Wallston KA, Joosten YA, Israel TL, L Simpson C, Vaughn Y, Williams NA, Stallings S, Ichimura JS, Wilkins CH. Patient Stories Can Make a Difference in Patient-Centered Research Design. *Journal of Patient Experience.* 2020.

Novak LL, Simpson CL, Coco J, McNaughton CD, Ehrenfeld JM, Bloos SM, Fabbri D. Understanding the Information Needs and Context of Trauma Handoffs to Design Automated Sensing Clinical Documentation Technologies: Qualitative Mixed-Method Study of Military and Civilian Cases. *J Med Internet Res.* 2020;22(9):e17978.

Novak L, Harris J. Anthropology and Informatics in Health Care. *Oxford Research Encyclopedia of Anthropology*. 2020.

Park Y, **Jackson GP**, Foreman MA, Gruen D, Hu J, Das AK. Evaluating artificial intelligence in medicine: phases of clinical research. *JAMIA.* 2020.

Ramakrishnan A, Zheng C, Fontes ML, Lombard FW, Woolard AA, Shi Y, Shotwell MS, Billings FT, Pretorius M, **Wanderer JP**, Vyas R, Absi TS, Shah AS, Kertai MD. Mean platelet volume and cardiac-surgery–associated acute kidney injury: a retrospective study. *Canadian Journal of Anesthesia.* 2020.

Scheving WL, Froehler M, Hart K, McNaughton CD, **Ward MJ**. Inter-facility transfer for patients with acute large vessel occlusion stroke receiving mechanical thrombectomy. *The American Journal of Emergency Medicine.* 2020.

Schutz N, Olsen CA, McLaughlin AJ, Yi WM, **Nelson SD**, Kalichira AL, Smith AH, Miller KA, Le T, Chaffee BW, Worthy Woodbury CK, Patel H. ASHP Statement on the Use of Artificial Intelligence in Pharmacy. *American Journal of Health-System Pharmacy.* 2020.

Sengstack PP, Adrian B, Boyd DL, Davis A, Hook M, Hulett SL, Karp E, Kennedy R, Langford LH, Niblett TA. The Six Domains of Burden: A Conceptual Framework to Address the Burden of Documentation in the Electronic Health Record (Position Paper). *American Nursing Informatics Association*. 2020.

Sharma B, Willis VC, Huettner CS, Beaty K, Snowdon JL, Xue S, South BR, **Jackson GP**, Weeraratne D, Michelini V. Predictive article recommendation using natural language processing and machine learning to support evidence updates in domain-specific knowledge graphs. *JAMIA.* 2020.

Siew ED, **Parr SK**, Abdel-Kader K, Perkins AM, Greevy RA, Vincz AJ, Denton J, Wilson OD, Hung AM, Ikizler TA, Robinson-Cohen C, Matheny ME. Renin-angiotensin aldosterone inhibitor use at hospital discharge among patients with moderate to severe acute kidney injury and its association with recurrent acute kidney injury and mortality. *Kidney International*. 2020.

Song W, Kossowsky J, Torous J, Chen C-Y, Huang H, Mukamal KJ, Berde CB, Bates DW, **Wright A**. Genome-wide association analysis of opioid use disorder: A novel approach using clinical data. *Drug and Alcohol Dependence.* 2020;217:108276.

Swietlik M, **Sengstack P**. An Evaluation of Nursing Admission Assessment Documentation to Identify Opportunities for Burden Reduction. *Journal of Informatics Nursing*. 2020;5(3):7-11.

Reminder to Send Updates for Recognition

If you (or another VCLIC Member) publishes a paper; has an abstract accepted at a conference; are interviewed for or written up in a news article; receive any awards, accolades, or honors; or completed/are currently undertaking any projects you would like to highlight, please email me with or forward this information:

- Names of VCLIC members/VUMC staff who participated in or worked on the project, paper, or abstract (or who received the award/honor)
- The title of the Project, Paper, Abstract, Article, or Award
- The journal, conference, or news publication (this can be podcasts, radio, or more "traditional," news mediums)

Nothing is too big or too small to celebrate, and this information will be featured on the [News section of our website](#) as well. As time goes on, I am hoping to also improve our Twitter presence, so feel free to add, tag, or tweet us at [@VUMC_VCLIC](#) too!

Thank you, and see you next month!