

# VANDERBILT CLINICAL INFORMATICS CENTER

# VCLIC News and Happenings, Volume 32

Happy New Year, and welcome back to VCLIC News! We hope you all had a wonderful and restful break and are ready for what 2023 will bring.

We have a few exciting events and announcements to start us off: First, we are excited to kick off our spring semester seminar series on January 25th at noon with **Julia Alder-Milstein, PhD**, of UCSF! Dr. Adler-Milstein will present on *Turning Digital Fumes into a Breath of Fresh Air*, and the zoom link to her talk is included below. We hope to see you all there! Additionally, we will host **Bryan Steitz, PhD**, on February 15<sup>th</sup>, 2023 at 12:00 pm to talk about his work *Promoting Engagement through Information Sharing: Understanding the Impact of Open Results on Patients and Providers*. Please see below for additional details.

Most excitingly, we would also like to introduce our newest initiative, <u>VCLIPS</u>, or **VCLIC Practical Shorts**, a series of bite-size instructional videos on a variety of topics that will have accompanying synchronous learning sessions throughout the semester. We are really excited to engage with our community around this content and hope to see many of you at our upcoming sessions (details below and additional information coming soon).

Our featured member this month is **Aileen Wright, MD, MS**, a super star VCLIC member who has contributed to several initiatives, from Clickbusters to providing workshops on Epic use, and now to recording several VCLIPS for everyone to learn from. We are thrilled to feature her and grateful for all her participation!

Finally, and per usual, we have several Center members who have **received awards**, been mentioned in the **news**, presented **lectures** and at conferences, **published papers**, have had **abstracts** accepted to conferences, and had **honors or fellowships** bestowed on them.

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

## **VCLIC Events**



Please join us next week as we host **Julia Adler-Milstein, PhD**, Professor of Medicine and Director of the Center for Clinical Informatics and Improvement Research at UCSF, on January 25th, 2023 from 12:00-1:00 pm CT. Dr. Adler-Milstein will present on *Turning Digital Fumes into a Breath of Fresh Air*: While EHR data is heavily used for clinical research, there is also significant potential for behavioral and social science research. In my talk, I will describe EHR event logs as a novel source of data that captures individual clinician and clinical team behaviors and give examples of how such data can be applied to address policy- and practice-based questions related to EHR user interface design, clinician burnout, and clinical process outcomes.

• Zoom Link



For our seminar for next month, February 15th, 2023 at 12:00 pm CT, VCLIC is excited to host **Bryan Steitz, PhD,** an instructor in the Department of Biomedical Informatics and researcher for the Vanderbilt Clinical Informatics Center. Bryan will present on *Promoting Engagement through Information Sharing: Understanding the Impact of Open Results on Patients and Providers:* The Final Rule of the 21st Century Cures Act mandates the immediate release of electronic health data, including all test results (Open Results) upon patient request. The intent to improve information sharing offers significant benefits to both patients and providers, but limited empiric evidence to guide implementation strategies has prompted concern for patient wellbeing and provider workflow. In this presentation, I will discuss findings and implications from an ongoing body of work on results release policies, patient perceptions, and provider work on immediate release of test results detailing the patient and provider perspectives to highlight current best practices and opportunities for improvement.

# Introducing VCLIPS!



The <u>Vanderbilt Clinical Informatics Center</u> is pleased to announce the launch of <u>Vanderbilt Clinical</u> <u>Informatics Practical Shorts (VCLIPS)</u>. These are bite-size instructional videos on practical clinical informatics topics from expert VCLIC faculty. If you've ever wanted to learn more about how to engage with eStar (Epic), create new interventions or tools in our EHR, access data, perform human-centered design or evaluate interventions look no further. *Please note that you must be on the VUMC network or VPN to access VCLIPS*.

You can watch these videos, and complete associated hands-on exercises anytime, but we will also have in person sessions for each module where we'll repeat the content live, work through the hands-on exercises together and answer any questions you have. The modules we're releasing today are:

- <u>Overview of VCLIC and Clinical Informatics at VUMC</u> (Adam Wright, PhD)
  - o Learn about the history and background of EHR use at VUMC, how to engage with the EHR, and how VCLIC facilitates clinical informatics
- Intro to Epic and Build Capabilities (Aileen Wright, MD, MS; Allison McCoy, PhD; in person session on February 21st, 2023 from 1:00-2:30 pm)
  - o Get an introduction to how providers interact with the EHR for patient chart review and patient visits
  - o Learn how to build Best Practice Advisories (BPAs) for clinical decision support and other related components like groupers and preference lists
- <u>Data Resources</u> (Bryan Steitz, PhD; Allison McCoy, PhD; in person session on March 21st, 2023 from 1:00-2:30 pm)
  - o Get an overview of the data resources available and how to use Excel for data cleaning, descriptive statistics, and presentation-ready data plots
    - VICTR Data Resources
      - Learn about the Synthetic Derivative and Research Derivative as well as how to use the Record Counter tool on StarBRITE
    - Epic Data Resources
      - Learn about Hyperspace, Clarity, and Caboodle, as well as the data extraction tools Reporting Workbench and SlicerDicer
- <u>Human-Centered Design Principles and Processes</u> (Thomas Reese, PharmD, PhD; Megan Salwei, PhD; in person session on April 18th, 2023 from 1:00-2:30 pm)
  - o Learn about how to use human-centered design principles and processes to make interactive systems and tools more usable
- Evaluation and Dissemination of HealthIT Interventions (Adam Wright, PhD; in person session on May 2<sup>nd</sup>, 2023 from 1:00-2:30 pm)
  - Learn why evaluation and dissemination are key parts of the clinical informatics life cycle and how to apply some common measurement frameworks and study design options

Each module has several short explanatory videos, many with demonstrations that you can follow along with, followed by an exercise meant to solidify learning. We will send out more details and signup information for each in-person session over the course of the semester. We hope to see you at the in-person sessions and to engage with you more around this content. Please reach out to me or Elise Russo (elise.russo@vumc.org) with any questions, suggestions or feedback. Please let us know if you have ideas for additional VCLIPS that we could produce – we're hoping to grow our library over time.

# Save The Date: March 31<sup>st</sup>, 2023: All Day FHIR Workshop with Russell Leftwich, MD

VCLIC is excited to be working with **Russell Leftwich**, **MD**, Professor of Biomedical Informatics at Vanderbilt and Senior Clinical Advisor for Interoperability at InterSystems, to provide interested folks at VUMC with an opportunity to have a hands-on, all-day experience (in person) learning about, designing, and building FHIR Applications. More details to come in the next few weeks, but if you are interested, please block off **Friday**, **March 31**<sup>st</sup>, **2023** on your calendar!

# VUMC Physician Builder Program Featured on Epic's UserWeb in Physician Builder Spotlight!

In a November Epic-run Webinar (Physician Builder Spotlight), **Jon Wanderer, MD; Chetan Aher, MD; Wael Alrifai, MD; and Sara Horst, MD**, all VCLIC members, spoke about <u>Creating a Successful Physician</u> <u>Builder Program</u>.

You can view the webinar here.



## Member Spotlight: Aileen Wright, MD, MS

**Aileen Wright, MD, MS** grew up in Cambridge, MA, completed her B.Sc in neuroscience at McGill University, and worked as a research assistant at Brigham and Women's Hospital (BWH) in Boston, where she did quality, safety and informatics research with the clinical laboratory. She then attended medical school at Yale University and completed an internal medicine residency at Brigham and Women's Hospital. After residency, she completed a biomedical informatics fellowship at Vanderbilt and joined the DBMI faculty in 2021. Her interests are in supporting clinicians through innovative clinical decision support (CDS) tools including AI-assisted CDS. She enjoys spending time with her husband Adam and their children Isaac (8), Grace (3), and Faith (1).

We are happy to feature her as part of our member spotlight this month and appreciate her involvement with VCLIC! In her own words:

#### What are you working on?

"For my master's thesis, I developed <u>MOSS</u>, a platform to catalyze the creation of predictive models using clinical data. Recently, my focus has been on using machine learning to predict hypoglycemia and other adverse events. I've working on transforming <u>a model I've published</u> into a CDS tool in Epic. I also help lead the <u>Department of Medicine Physician Builder Program</u>. Physician builders are clinicians with training and access to build tools in Epic. I've also been involved in rolling out a third-party app called AgileMD Pathways, which integrates clinical algorithms into Epic, helping clinicians make decisions and place orders directly from a clinical algorithm."

#### How have you been involved in VCLIC?

"I have really enjoyed working with VCLIC to record VCLIPS. I'm hoping <u>my videos introducing Epic to</u> <u>non-clinicians</u> will be useful to anyone interested in seeing how a primary care doctor like myself uses Epic, and ways that clinical data used for research gets into Epic. I think the best part about VCLIC is the community and the enthusiasm created when people who are excited about clinical informatics come together and collaborate. I really enjoy collaborating, and some of my specific interests are medication safety, the clinical laboratory, and using machine learning to develop innovative CDS."

## Upcoming Conference Submission Deadlines

- <u>Symposium on Artificial Intelligence for Learning Health Systems (SAIL)</u>
  - Abstract Submission Deadline: January 20, 2023
  - o Registration opens: March 2023
- International Conference on Machine Learning (ICML)
  - ° Full Paper Submission Deadline: January 26, 2023
- <u>Medical Informatics Europe (MIE)</u>
  - o Other Submissions Deadline (Workshops, Demonstrations, Panels): February 1, 2023
- <u>American Society of Clinical Oncology (ASCO) Annual Meeting</u>
  - o Abstract Deadline: February 14, 2023
- Epic UGM
  - Deadline for Presentation Proposal Submission: End of Spring (TBA) \*proposal submission now open
- <u>AcademyHealth Annual Research Meeting (ARM)</u>
  - o Late Abstracts Submission Deadline: March 27, 2023
- <u>Machine Learning for Healthcare</u>
  - o Abstract Submission Deadline: April 12, 2023
- Association for Computing Machinery Conference on Bioinformatics, Computational Biology, and Health Informatics (ACM-BCB)

- Poster/Abstract Submission Deadline: May 14, 2023
- Paper Submission Deadline: May 22, 2023

Details on upcoming conferences and conference deadlines can be found on our Confluence page, <u>here</u>.

# Presentations, Interviews, Honors, and Awards

## Honors/Awards

- Yaa Kumah-Crystal, MD, MPH, MS has accepted an invitation to attend a <u>symposium on Voice</u> <u>Technology sponsored by the Bill & Melinda Gates Foundation on February 15<sup>th</sup>.</u>
- **Colin Walsh, MD, MA,** was recently elected to the <u>American College of Medical Informatics</u> (<u>ACMI</u>) Class of 2022 and was inducted into the ACMI at the 2022 American Medical Informatics Association (AMIA) Annual Symposium, held in Washington, DC.
- Wael Alrifai, MD, MS has <u>been invited to join the AAP Partnership for Policy Implementation</u> (PPI), which assigns pediatric informaticians to groups authoring clinical guidelines, policy statements, and clinical reports, with the goal of ensuring that clinical recommendations are clear, unambiguous, actionable, executable, and computable.
- **Colin Walsh**, **MD**, **MA**, among other VUMC researchers, was <u>featured in *Vanderbilt Medicine*</u> to discuss various uses of machine learning and the pros/cons of ML.
- VUMC Clinical Directors Shane Stenner, Thomas Reese, PharmD, PhD; Dara Mize, MD; Patty Sengstack, DNP, RN-BC, FAAN; Scott Nelson, PharmD, MS; Travis Osterman, DO, MS; and Yaa Kumah-Crystal, MD, MPH, MS gave <u>ignite-style talks in a VCLIC course</u> last week.

# Conference and other Presentations

- Scott Nelson, PharmD, MS, will be presenting at the <u>Cleveland Clinic Medication Analytics</u>, <u>Safety & Technology (MAST) conference</u> in May 2023. He will be presenting "Artificial Intelligence to Support Medication Use - Separating Myths from Facts and Future Directions."
- Johnathan P. Wanderer, MD, presented a talk as part of the Anesthesiology grand rounds at the University of Florida, Department of Anesthesiology, in November.
  - Talk title: "Better Living Through Data: Perioperative Informatics for Patient Care, Education, and Research"
- Elise Russo's, MPH presentation proposal with Adam Wright, PhD and Allison McCoy, PhD <u>"Enabling Informatics Innovators to Access Data: The VDAWGs Program"</u> was accepted by Epic for XGM 2023.
- Allison McCoy's, PhD presentation <u>"Enabling Clinical Research and Innovation through a Clinical</u> Informatics Core: Lessons Learned One Year Later" was accepted by Epic for XGM 2023.
- An abstract, titled "<u>Neonatal SOFA Scores Predict Mortality in Infants with Necrotizing</u> <u>Enterocolitis and Spontaneous Intestinal Perforation</u>", Wael Alrifai, MD, MS and Jamie R.

**Robinson, MD, MS, PhD** have co-authored on was <u>accepted to The Surgical Infection Society as</u> <u>an oral presentation</u>.

### Publications

Strayer TE, Spalluto LB, Burn A, Lindsell CJ, Henschke CI, Yankelevitz DF, Moghanaki D, Dittus RS, Vogus TJ, Audet C, **Kripalani S**, Roumie CL, Lewis JA. <u>Using the Framework for Reporting Adaptations and</u> Modifications-Expanded (FRAME) to study adaptations in lung cancer screening delivery in the Veterans <u>Health Administration: a cohort study.</u> *Implement Sci Commun.* 2023;4(1):5. doi:<u>10.1186/s43058-022-</u>00388-x

Ende HB, French B, Shi Y, Damron J, Bauchat J, Dumas S, **Wanderer J**. <u>Implementation of an Epidural</u> <u>Rounding Reminder in the Electronic Medical Record Improves Performance of Standardized Patient</u> <u>Assessments during Labor</u>. *Appl Clin Inform*. Published online January 12, 2023. doi:<u>10.1055/a-2011-</u> <u>8259</u>

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Afify ZAM, Taj MM, Orjuela-Grimm M, Srivatsa K, Miller TP, Edington HJ, Dalal M, Robles J, Ford JB, Ehrhardt MJ, Ureda TJ, Rubinstein JD, McCormack S, Rivers JM, Chisholm KM, Kavanaugh MK, Bukowinski AJ, Friehling ED, Ford MC, Reddy SN, Marks LJ, **Smith CM**, Mason CC. <u>Multicenter study of</u>

pediatric Epstein-Barr virus-negative monomorphic post solid organ transplant lymphoproliferative disorders. *Cancer*. Published online December 26, 2022. doi:10.1002/cncr.34600

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Adams RS, Forster JE, Gradus JL, Hoffmire CA, Hostetter TA, Larson MJ, **Walsh CG**, Brenner LA. <u>Time-dependent suicide rates among Army soldiers returning from an Afghanistan/Iraq deployment, by</u> <u>military rank and component</u>. *Inj Epidemiol*. 2022;9(1):46. doi:<u>10.1186/s40621-022-00410-9</u>

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Bianchi SB, **Jeffery AD**, Samuels DC, Schirle L, Palmer AA, Sanchez-Roige S. <u>Accelerating Opioid Use</u> <u>Disorders Research by Integrating Multiple Data Modalities</u>. *Complex Psychiatry*. 2022;8(1-2):1-8. doi:10.1159/000525079

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# 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 <u>News section of</u> <u>our website</u> 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 <u>@VUMC\_VCLIC</u> too!

## Thank you, and see you soon!