



## VCLIC News and Happenings, Volume 31

Happy Holidays, and welcome to the final VCLIC Newsletter of 2022—it's hard to believe it will be 2023 in a few short weeks!

To start, we are excited to announce that our spring semester seminar series is kicking off next month with **Julia Alder-Milstein, PhD**, of UCSF! Dr. Adler-Milstein will present on *Turning Digital Fumes into a Breath of Fresh Air*, and we will share more details about her talk soon.

Additionally, we were not surprised that so many VCLIC members were recognized during the DBMI Employee Celebration and Holiday Party. Notably, we would like to congratulate **Allison McCoy, PhD** as the winner of the Chair's 2022 DBMI Above & Beyond Award for Faculty, **Yaa Kumah-Crystal, MD, MS, MPH**, as the TODE Award Winner, and **Laurie Novak, PhD**, as the Outstanding Educator Award Winner.

Our featured member this month is **Jennifer Andrews, MD, MSc**, who serves as Medical Director at the VUMC Blood Bank and Division Chief at the VUMC Transfusion Medicine, and we are excited to share some of her work with you all.

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.

See you next year!

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

## VCLIC Events

Our next seminar will be January 25<sup>th</sup>, 2023 at 12:00 pm CT. VCLIC is excited to host **Julia Adler-Milstein, PhD**, Professor of Medicine and Director of the Center for Clinical Informatics and Improvement Research at UCSF, on January 25<sup>th</sup>, 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.

VCLIC Monthly Seminar

# Turning Digital Fumes into a Breath of Fresh Air

January 25th, 2023

12:00 - 1:00 PM CT

Details at <https://www.vumc.org/vclic/events-announcements>



## DBMI Annual Employee Celebration Award Winners



During the DBMI Annual Employee Celebration and Holiday Party on December 6<sup>th</sup>, 2022, **Allison McCoy, PhD**, was awarded the Above and Beyond Award for Faculty by the Department Chair, Peter Embi, MD, MS. Allison received this award for her productivity and service to VUMC and the department, especially in consideration of her work as the Scientific Director of the Clinical Informatics Core. In the Core's first year of operation (August 2021-August 2022), the Core received 101 total requests from 87 individual researchers (15 were repeat customers). In that time, 42 of the requests

were completed, with about 20 projects in progress, 13 waiting funding (grants), and the remainder either awaiting decisions by the requestor or determined out of scope. The Core continues to acquire new and additional business and is improving its cost recovery each month—several customers have submitted feedback stating that Allison and her team are doing a phenomenal job and validating the importance of having such a service at VUMC. Through her work with the Core, Allison has facilitated and built several Epic-based interventions, including clinical decision support and predictive models, which have led to several publications and improved care and outcomes at VUMC.

In addition to Allison’s award, two other VCLIC members received departmental awards at the celebration:

**Laurie Novak, PhD**, received the DBMI Outstanding Educator Award for her fantastic teaching and course instruction.

**Yaa Kumah-Crystal, MD, MS, MPH**, received the DBMI TODE Award for her outstanding work as Clinical Director, especially her projects on voice recognition and EHRs.

### Reminder: Epic Physician Builder training is virtual through April 2023

At Epic’s User Group Meeting it was announced that the Physician Builder training will remain virtual through April 2023. You can see the requirements for the training via Epic’s UserWeb, [here](#). Information about joining the Physician Builder Program at VUMC can be found on our [Confluence site](#).

### Member Spotlight: Jennifer Andrews, MD, MSc



Dr. Andrews joined the faculty at Vanderbilt in 2018 where she serves as the Medical Director of the Blood Bank. She started her career at Stanford University as a faculty member in both Pathology (Transfusion Medicine) and Pediatrics (Hematology/Oncology), and successfully built a Pediatric Transfusion Medicine Program at Lucile Packard Children’s Hospital Stanford. She has served as the PI for multiple clinical trials, including a multi-site trial for fibrinogen concentrate use in neonatal

cardiopulmonary bypass surgeries. She continues to see pediatric hematology patients and has received many awards for her teaching, including Best Lecture at Stanford University in 2014 and the Junior Faculty Teaching Award for the Clinical Pathology faculty at Stanford in 2018. Her research interests include utilizing technology for best practices for ordering blood and laboratory tests in children, patient blood management & blood utilization (especially for children), and multi-site clinical trials work for safer blood products and laboratory testing for children.

Currently, Dr. Andrews serves as Medical Director at the VUMC Blood Bank and Division Chief at the VUMC Transfusion Medicine, and as an Associate Professor in the Department of Pathology, Microbiology, and Immunology and Department of Pediatrics. We are excited to feature her and to have her as a part of VCLIC! In her own words:

What are you working on?

We have an awesome team (including a few other members of VCLIC, Randy Winstead and Jon Wanderer) working on a prototype that is almost ready to go-live for all of VUMC that we affectionately call the "Pizza Tracker," but for blood. It's a common sense tool that we all use in our daily lives outside the hospital, like when we order food, we can see that our order was received, or it's being made or it's out for delivery. Well, providers want to know where the blood is that their patient needs, and they want to know in real-time. The staff in the blood bank receives a lot of calls asking this very question, which slows down their work in preparing blood products. So we've customized EPIC and taken into account our work flows in the blood bank to build this awesome informational tool.

How have you been involved in VCLIC?

I stumbled upon VCLIC doing my regular, everyday work caring for my hematology patients and helping providers with blood bank issues and questions here at VUMC. There is a lot of informatics built into my job directing the blood bank, and the VCLIC leadership was insightful and encouraged me to become board-certified in Clinical Informatics during a lull in the pandemic. I absolutely love that VCLIC members are ready to partner with anyone in the hospital that needs help, and they've helped us build some very cool, customized tools in EPIC. I was so honored to go present some of our work this year at AMIA, including our transfusion dashboard, a "one-click" page with all a provider needs to know about their patient when considering a transfusion. It was really fun to see all the great work from VCLIC represented there.

What areas are you interested in, and what would you like to collaborate with others on?

I'm most interested in making blood product ordering safer and easier, with real-time education about optimal transfusion practices since most providers aren't taught a lot about transfusion medicine. We have an amazing team and are open to new, "dream big" ideas, so please feel free to email me if you have one – I think our team can build anything (with the help of VCLIC, of course)!

## New VCLIC Staff Member: Nikkie Dutta, B.A. & B.S Candidate



**Nikkie Dutta** is a new DBMI employee and serves as the Clinical Informatics Marketing and Communications Assistant for VCLIC. She is an undergraduate student in her 3rd year at Vanderbilt University, double majoring in Cognitive Studies and Medicine, Health, & Society, with minors in Data Science and Scientific Computing. During her time at Vanderbilt, Nikkie has been involved in research as a research assistant in The Stress & Early Adversity (SEA) Lab and The Qualitative Research Core. Nikkie's primary interests lie in Healthcare Policy and Informatics, and currently, she is a research intern at the VUMC Department of Health Policy.

### Upcoming Conference Submission Deadlines

- [Pediatric Academic Societies \(PAS\) Annual Meeting](#)
  - Abstract deadline: January 4, 2023
- [American Society of Clinical Oncology \(ASCO\) Annual Meeting](#)
  - Abstract Deadline: February 14, 2024

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

### Presentations, Interviews, Honors, and Awards

#### Honors/Awards

- **Martin Were, MD, MS** was promoted to the rank of Professor of Biomedical Informatics. Congratulations, Martin!
- **Bryan Steitz, PhD** has received a research award from the [Google Health Equity Research Initiative](#). He received a total of \$20,000 in research funding to use for his project "Reducing Literacy-Related Health Inequities by Developing Patient Language Models to Improve

Comprehension of Medical Text” and also received an additional credit for the Google Cloud Platform for \$49,285.

- **Dario Giuse, Dr. Ing, MS**, along with collaborators from VUMC, the US and across the globe, published a paper in *PLOS ONE* titled “[Systematic Review of International Studies Evaluating MDRD and CKD-EPI Estimated Glomerular Filtration Rate \(eGFR\) Equations in Black Adults](#)”. The piece was [featured in the VUMC Reporter](#).
- **Scott Nelson, PharmD, MS**, discussed his journey into the pharmacy and clinical informatics fields on the “[Pharmacy, IT, & Me Podcast](#).”
- **Mhd Wael Alrifai, MD, MS** has accepted the position as the new [MS-ACI Capstone Course Director for Spring 2023](#). Dr. Alrifai is an Assistant Professor of Pediatrics in the Division of Neonatology, and an Assistant Professor of Biomedical Informatics at the Vanderbilt University Medical Center. He completed Neonatology Fellowship here at VUMC, as well as a MS in the MS-ACI program. Welcome to the team Dr. Alrifai!
- **Sara Horst, MD, MPH**, Director of Ambulatory Telehealth, shared her perspective on [VUMC’s recent transition from Zoom to Epic Telehealth in the VUMC reporter](#)

## Conference and other Presentations

- Aramvareekul V, **Nelson SD**, Siska M, Cox G. Validated Artificial Intelligence: The Future of Pharmacy and its Applications. [Podium presentation at the 2022 American Society of Health-System Pharmacists \(ASHP\) Midyear Clinical Meeting and Exhibition](#). Las Vegas, NV. Dec 2022
- **Nelson SD**, Kabisatpathy S, Clauson K. Digital Health 101: Interventions for Maximum Pharmacist Impact. [Podium presentation at the 2022 American Society of Health-System Pharmacists \(ASHP\) Midyear Clinical Meeting and Exhibition](#). Las Vegas, NV. Dec 2022
- Gilmer LE, **Nelson SD**, Wybo JM. Models for Using Technology and Supportive Services to Remove Access Barriers for Patients. [Podium presentation at the 2022 American Society of Health-System Pharmacists \(ASHP\) Midyear Clinical Meeting and Exhibition](#). Las Vegas, NV. Dec 2022
- **Nelson SD**. Introduction to Artificial Intelligence. [Invited presentation at the 67 Congreso Nacional de la Sociedad Española de Farmacia Hospitalaria \(SEFH\)](#) [67<sup>th</sup> National Congress of Spanish Society of Hospital Pharmacists]. Barcelona, Spain. Nov 2022
- **Spann A**, Bishop KM, **Ozdas Weitkamp A**, Stenner SP, **Nelson SD**, Izzy M. A novel EHR-based approach can automate risk stratification and care gap detection in primary care for patients with nonalcoholic fatty liver disease. [Podium presentation at The Liver Meeting](#). Nov 2022
- **Nelson SD**, Wong A, Dorsch MP, Cohen LJ. The Role of Artificial Intelligence and Wearable Tech in the Profession of Pharmacy. [Podium presentation at the 2022 ACCP Global Conference on Clinical Pharmacy](#). San Francisco, CA. Oct 2022
- **Siru Liu** presented her poster on “[Delirium Prediction using Long Short-Term Memory \(LSTM\) in the Electronic Health Record](#)” at the [2022 Neural Information Processing Systems conference recently](#).
- **Travis Osterman** discussed “Leveraging Structured Genomic Data” at the [Perspectives in Precision Oncology from Prevention to Treatment event](#), hosted by the Vanderbilt-Ingram Cancer Center and the AJMC.

- Rachel A. Hilton, **Laurie Novak**, Alan Storrow, **Sunil Kripalani**, Dandan Liu, **Casey Distaso**, Anna Sachs, and Deonni P. Stollendorf have an [abstract accepted for the 2022 Academy Health Dissemination and Implementation Conference](#). “Preliminary stakeholder perspectives and QI implications of the implementation of clinical decision support for acute heart failure in emergency departments: A qualitative inquiry.”

## Publications

Dean F. Sittig, **Patricia Sengstack**, Hardeep Singh. [Guidelines for US Hospitals and Clinicians on Assessment of Electronic Health Record Safety Using SAFER Guides](#). *JAMA*. February 22, 2022;327(8):719-720.

Rubina F. Rizvi, Courtney B. VanHouten, Van C. Willis, Bedda L. Rosario, Brett R. South, Megan Sands-Lincoln, David Brotman, Jeffery Lenert, Jane L. Snowdon, **Gretchen P. Jackson**. [Understanding a Care Management System’s Role in Influencing a Transitional-Aged Youth Program’s Practice: Mixed Methods Study](#). *JMIR Hum Factors*. December 16, 2022;9(4):e39646.

Jordan Axelrad, Millie Long, **Sara Horst**, Anita Afzali, Tamar Sapir, Kristina Fajardo, Kara De Felice, Robert Sandler, Raymond Cross. [A Novel Remote Patient and Medication Monitoring Solution to Improve Adherence and Persistence With Inflammatory Bowel Disease Therapy \(ASSIST Study\): Protocol for a Randomized Controlled Trial](#). *JMIR Res Protoc*. December 15, 2022;11(12):e40382.

Genevieve B. Melton, James J. Cimino, Christoph U. Lehmann, **Patricia R. Sengstack**, **Joshua C. Smith**, William M. Tierney, Randolph A. Miller. [Do electronic health record systems “dumb down” clinicians?](#) *J Am Med Inform Assoc*. December 13, 2022;30(1):172-177.

John M. Bryant, Christina S. Boncyk, Kimberly F. Rengel, Vivian Doan, Connor Snarskis, Matthew D. McEvoy, Karen Y. McCarthy, Gen Li, Warren S. Sandberg, **Robert E. Freundlich**. [Association of Time to Surgery After COVID-19 Infection With Risk of Postoperative Cardiovascular Morbidity](#). *JAMA Netw Open*. December 1, 2022;5(12):e2246922.

Zeinab Afify, Manuela Orjuela-Grimm, **Christine Moore Smith**, Mansi Dalal, James B. Ford, Pallavi Pillai, Joanna M. Robles, Sonika Reddy, Sarah McCormack, Matthew J. Ehrhardt, Tonya Ureda, Warren Alperstein, Holly Edington, Tamara P. Miller, Jeremy D. Rubinstein, Madison Kavanaugh, Andrew J. Bukowski, Erika Friebling, Julie M. Rivers, Karen M. Chisholm, Lianna J. Marks, Clinton C. Mason. [Burkitt lymphoma after solid-organ transplant: Treatment and outcomes in the paediatric PTLD collaborative](#). *Br J Haematol*. Published online December 1, 2022.

Joseph T. DiPiro, Todd W. Nesbit, Charles Reuland, Francesca E. Cunningham, Pamela Schweitzer, Marie A. Chisholm-Burns, Leyner Martinez, Rita Shane, Christopher M. Scott, **Scott D. Nelson**, **Dara L. E. Mize**, Elva Angeliqve Van Devender, Lance Oyen. [ASHP Foundation Pharmacy Forecast 2023: Strategic Planning Guidance for Pharmacy Departments in Hospitals and Health Systems](#). *Am J Health Syst Pharm*. Published online December 1, 2022:zxac274.

Shawn B. Sood, Louisa Anne Walker, Rangaraj Ramanujam, Daphne Hardison, **Jennifer Andrews**, Andrew H. Smith, Brian C. Bridges. [The Use of Antifactor Xa Assays in a Comprehensive Pediatric Extracorporeal Membrane Oxygenation Anticoagulation Protocol is Associated with Increased Survival and Significant Blood Product Cost-Savings](#). *J Pediatr Intensive Care*. December 2022;11(4):341-348.

**Lyndsay Nelson**, Samuel Alfonsi, Lauren LeSturgeon, **Lindsay Mayberry**. [Disparities in mobile phone use among adults with type 2 diabetes participating in clinical trials 2017-2021](#). *JAMIA Open*. 2022 Nov; 5(4):1-6. PMID: 36380850

David R. McIlroy, Matthew S. Shotwell, Marcos G. Lopez, Michelle T. Vaughn, Joanna S. Olsen, Cassandra Hennessy, **Jonathan P. Wanderer**, Matthew S. Semler, Todd W. Rice, Sachin Kheterpal, Frederic T. Billings, Multicenter Perioperative Outcomes Group. [Oxygen administration during surgery and postoperative organ injury: observational cohort study](#) *BMJ*. November 30, 2022;379:e070941.

**Robert E. Freundlich**, **Jonathan P. Wanderer**, Benjamin French, Ryan P. Moore, Antonio Hernandez, Ashish S. Shah, Daniel W. Byrne, Pratik P. Pandharipande. [Protocol for a randomised controlled trial: reducing reintubation among high-risk cardiac surgery patients with high-flow nasal cannula \(I-CAN\)](#). *BMJ Open*. November 25, 2022;12(11):e066007.

Ryan M. Wolf, Matthew Hall, **Derek J. Williams**, Alison R. Carroll, James W. Antoon, Charlotte M. Brown, Alison Herndon, Heather Kreth, Carrie Lind, Kelsey A. B. Gastineau, Katherine Spencer, My-Linh Ngo, Sarah Hart, Lindsay White, **David P. Johnson**. [Pharmacologic restraint use for children experiencing mental health crises in pediatric hospitals](#). *J Hosp Med*. Published online November 22, 2022.

Connie Fee, Julia Fuller, Carly E. Guss, Elizabeth R. Woods, Ellen R. Cooper, Urmi Bhaumik, Dionne Graham, Sandra K. Burchett, Olivia Dumont, Emily B. Martey, Maria Narvaez, Jessica E. Haberer, Dallas Swendeman, **Shelagh A. Mulvaney**, Vikram S. Kumar, Jonathan L. Jackson, Y. Xian Ho. [A Digital Platform to Support HIV Case Management for Youth and Young Adults: Mixed Methods Feasibility Study](#). *JMIR Form Res*. November 21, 2022;6(11):e39357.

**Lyndsay Nelson**, McKenzie Roddy, Erin Bergner, Jesus Gonzalez, Chad Gentry, Lauren LeSturgeon, **Sunil Kripalani**, Pamela Hull, **Lindsay Mayberry**. [Implementation determinants and strategies for self-management support text messaging interventions in safety net clinics](#), *Journal of Clinical and Translational Science*. 2022 Nov 14; 1-26. <https://doi.org/10.1017/cts.2022.503>.

Kelly M. Shaffer, **Lindsay S. Mayberry**, Emily Georgia Salivar, Brian D. Doss, Amanda M. Lewis, Kimberly Canter. [Dyadic digital health interventions: Their rationale and implementation](#). *Procedia Comput Sci*. 2022;206:183-194.

Gabriella E. Glassman, Laura Dellalana, **Eric R. Tkaczyk**, Isaac Manzanera Esteve, Joyce Yongxu Huang, Austin Cronin, J. Randall Patrinely, Shervin Etemad, Patrick E. Assi, Shelia Ridner, Antonio Jorge Forte, Salam Al Kassis, Galen Perdikis. [Measuring Biomechanical Properties Using a Noninvasive Myoton Device for Lymphedema Detection and Tracking: A Pilot Study](#). *Eplasty*. 2022;22:e54.

Audra J. Reiter, Martha-Conley E. Ingram, Mehul V. Raval, Elisa Garcia, Madelyn Hill, Arturo Aranda, Nicole M. Chandler, Raquel Gonzalez, Kristen Born, Shale Mack, Abdulraouf Lamoshi, Aaron M. Lipskar, Xiao-Yue Han, Elizabeth Fialkowski, Brianna Spencer, Afif N. Kulaylat, Amrene Barde, Ami N. Shah, Maeva Adoumie, Erica Gross, Steven C. Mehl, Monica E. Lopez, Valerie Polcz, Moiz M. Mustafa, Jeffrey W. Gander, Travis M. Sullivan, Jason P. Sulkowski, Owais Ghani, **Eunice Y. Huang**, David Rothstein, E. Peter Muenks, Shawn D. St Peter, Jason C. Fisher, Dina Levy-Lambert, Allison Reichl, Romeo C. Ignacio, Bethany J. Slater, KuoJen Tsao, Loren Berman. [Postoperative respiratory complications in SARS-CoV-2](#)



[positive pediatric patients across 20 United States hospitals: A Cohort Study](#). *J Pediatr Surg*. Published online November 3, 2022:S0022-3468(22)00716-3.

**Patricia Sengstack**. [Implementing the Safety Assurance Factors for EHR Resilience \(SAFER\) Guides](#) *Comput Inform Nurs*. November 1, 2022;40(11):740-742.

## 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 soon!**