BIOGRAPHICAL SKETCH

Provide the following information for the Senior/key personnel and other significant contributors. Follow this format for each person. **DO NOT EXCEED FIVE PAGES.**

NAME: Blum, James

eRA COMMONS USER NAME (credential, e.g., agency login):

POSITION TITLE: Chief Health Information Officer

EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
Alma College	BS	1998	Computer Science
Johns Hopkins University School of Medicine	MD	2003	Medicine
University of Michigan	Residency	2007	Anesthesiology
University of Michigan	Fellowship	2008	Critical Care Medicine

A. Personal Statement

Dr. James Blum is uniquely qualified to lead this project, bringing extensive expertise at the intersection of clinical care, health informatics, and technology innovation. With over a decade of leadership experience in critical care, anesthesiology, and informatics, Dr. Blum has demonstrated the ability to translate emerging technologies into practical solutions for healthcare challenges.

As Chief Health Information Officer at the University of Iowa, Dr. Blum has spearheaded initiatives that integrate advanced data analytics and machine learning into clinical workflows, improving patient outcomes and operational efficiency. His academic contributions include peer-reviewed research on applying artificial intelligence to reduce provider burnout, enhance clinical decision support systems, and optimize data accessibility in electronic health records (EHR). These achievements illustrate his capacity to lead multidisciplinary teams and deliver transformative technologies in complex healthcare environments. Dr. Blum's certifications in Clinical Informatics, Critical Care Medicine, and Anesthesiology, combined with his leadership roles at major academic medical centers and Veterans Affairs facilities, further underscore his readiness to oversee this project. His track record of successful collaborations between clinicians, engineers, and data scientists positions him to navigate the technical and clinical complexities of implementing generative Al-driven solutions in patient portals.

B. Positions, Scientific Appointments, and Honors

Positions and Employment

2010 – 2011	University of Michigan Medical School Interim Director, Division of Critical Care Medicine, Department of Anesthesiology
2010 – 2012	University of Michigan Medical School Interim Director, Cardiovascular Intensive Care Unit
2008 – 2014	University of Michigan Medical School Associate Director, Critical Care Fellowship – Anesthesiology
2012 – 2014	University of Michigan Medical School Associate Director, Cardiovascular Intensive Care Unit
2013 – 2014	University of Michigan Medical School Director, Ann Arbor Veterans Affairs Surgical Trauma Intensive Care Unit
2014 – 2016	Emory University School of Medicine Chief, Critical Care Anesthesiology and Surgical Specialties Anesthesiology
2014 – 2019	Emory University School of Medicine Chief of Critical Care Anesthesiology
2019 – 2020	Emory University School of Medicine Vice Chair for Technology and Innovation
2016 – 2019	Atlanta Veterans Affairs Medical Center Chief of Anesthesiology
2019 – 2020	Atlanta Veterans Affairs Medical Center Technical Director Veterans Health Administration Clinical Informatics and Data Management Office – Data Management & Analytics
2020 – Present	University of Iowa Chief Health Information Officer

Other Experience and Professional Memberships

American Board of Anesthesiology – Certified in Anesthesiology

American Board of Anesthesiology – Certified in Critical Care Medicine

American Board of Preventive Medicine – Certified in Clinical Informatics

Michigan State Medical License – Active through 2026

Iowa State Medical License – Active through 2025

Georgia State Medical License – Active through 2025

American Society of Anesthesiologists

Society of Critical Care Medicine

Society of Critical Care Anesthesiologists

American Medical Informatics Association

Institute of Electrical and Electronics Engineers

Honors

- 2004 Internal Medicine Intern of the Year
- 2006 Poster Travel Award
- 2010 Best Project Proposal
- 2011 Kosaka Award for Best Clinical Research
- 2012 Best Pulmonary Abstract

C. Contributions to Science

- Mlsurac, J., Knake, L. A. & Blum, J. M. (2024). The effect of ambient artificial intelligence notes on provider burnout. Appl Clin Inform. DOI: 10.1055/a-2461-4576. PMID: 39500346.
- Knake, L. A., Asbury, R., Penisten, S., Meyer, N., Burrell, K., Chuffo Davila, R., Wright, A. & Blum, J.
 M. (2024). <u>Successfully transitioning an interruptive alert into a noninterruptive alert for central line dressing changes in the Neonatal Intensive Care Unit.</u> *Appl Clin Inform 15 (5) 965-969*. <u>DOI: 10.1055/a-2394-4462</u>. <u>PMID: 39163999</u>. PMCID: PMC11560397 (available on 2025-11-13).
- Dornbush, C., Mishra, A., Hrabe, J., Guyton, K., Axelrod, D., Blum, J. & Gribovskaja-Rupp, I. (2024). Remote monitoring after elective colorectal surgery, a pilot study. Surgery. DOI: 10.1016/j.surg.2024.08.025. PMID: 39307673.
- Musurac, J., Knake, L. A. & Blum, J. M. (2024). <u>Impact of ambient artificial intelligence notes on provider burnout</u>. *medRxiv*. DOI: 10.1101/2024.07.18.24310656.
- Cramer, E., Kuperman, E., Meyer, N. & Blum, J. M. (2024). <u>Improving naloxone co-prescribing through clinical decision support.</u> Cureus 16 (7) e63919. <u>DOI: 10.7759/cureus.63919.</u> <u>PMID: 39099893.</u> <u>PMCID: PMC11298243.</u>
- Lilly, C. M., Kirk, D., Pessach, I. M., Lotun, G., Chen, O., Lipsky, A., Lieder, I., Celniker, G., Cucchi, E. W. & Blum, J. M. (2024). <u>Application of machine learning models to biomedical and information system signals from critically ill adults.</u> Chest 165 (5) 1139-1148. <u>DOI: 10.1016/j.chest.2023.10.036.</u> <u>PMID: 37923292.</u>
- Wood, K. E., Pham, H. T., Carter, K. D., Nepple, K. G., Blum, J. M. & Krasowski, M. D. (2023). lmpact
 of a switch to immediate release on the patient viewing of diagnostic test results in an online portal at an academic medical center. JPATHOL Inform 14 100323. DOI: 10.1016/j.jpi.2023.100323. PMID: PMC10384271.
- Blum, J. M. & Kuehn, D. M. (2022). <u>Collaborative artificial intelligence in practice: the next steps.</u> Anesthesiology 137 (6) 664-665. <u>DOI: 10.1097/ALN.000000000004412.</u> <u>PMID: 36413783.</u>
- Jackson, B. R., Gold, J. A. W., Natarajan, P., Rossow, J., Neblett Fanfair, R., da Silva, J., Wong, K. K., Browning, S. D., Bamrah Morris, S., Rogers-Brown, J., Hernandez-Romieu, A. C., Szablewski, C. M., Oosmanally, N., Tobin-D'Angelo, M., Drenzek, C., Murphy, D. J., Hollberg, J., Blum, J. M., Jansen, R., Wright, D. W., Sewell, W. M., Owens, J. D., Lefkove, B., Brown, F. W., Burton, D. C., Uyeki, T. M., Bialek, S. R., Patel, P. R. & Bruce, B. B. (2021). Predictors at admission of mechanical ventilation and death in an observational cohort of adults hospitalized with coronavirus disease 2019. Clin Infect Dis 73 (11) e4141-e4151, DOI: 10.1093/cid/ciaa1459. PMID: 32971532, PMCID: PMC7543323.