Keith Feldman, PhD

Health Services and Outcomes Research
Children's Mercy Kansas City
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Education

PhD in Computer Science and Engineering, University of Notre Dame	2013-2018
MS in Computer Science and Engineering, University of Notre Dame	2013-2017
BS in Computer Science, University of Notre Dame	2008-2012

Current Academic and Professional Positions

Research Faculty, Division of Health Services and Outcomes Research Children's Mercy Hospital Kansas City, MO	2019-present
Assistant Professor, Department of Pediatrics University of Missouri Kansas City (UMKC) School of Medicine Kansas City, MO	2019-present
Adjunct Graduate Faculty, Department of Biomedical & Health Informatics University of Missouri Kansas City (UMKC) School of Medicine Kansas City, MO	2020-present
Faculty Director, Summer Scholars Program Children's Mercy Hospital Kansas City, MO	2023-present

Prior Positions and Employment

Postdoctoral Research Associate, Dept. of Computer Science and Engineering University of Notre Dame Notre Dame, IN	2018-2019
Research Assistant, Dept. of Computer Science and Engineering University of Notre Dame Notre Dame, IN	2013-2018
Graduate Student Fellow Computing Research Association – Education Committee (CRA-E) Washington, DC	2016-2018
Student Employee, Office of Research Compliance University of Notre Dame Notre Dame, IN	Spring 2017
Data Science Intern IBM Research Dublin, Ireland	Summer 2016
Data Science Intern Zirmed Chicago, IL	Summer 2015
Technical Analyst Credit Suisse New York, NY	2012-2013

Technical Analyst Intern
Credit Suisse
New York, NY — Summer 2011

Independent Researcher
Stony Brook University
Stony Brook, NY — Summer 2010

Professional Memberships and Activities

American Medical Informatics Association (AMIA) — 2015-Present
IEEE — 2015-Present

Honors and Awards

Selected among 20 Best PC members – The Web Conference 2021 (WWW 21) — 2021

Outstanding Reviewer Winner 5th International Workshop on Health Intelligence (W3PHIAI) — 2021

CSE Outstanding Research Assistant (1/3 selected across dept.) — 2019

Winning Team (Tied 1st) BHI Data Challenge – Best Novel Insights — 2018

Graduate Fellow
Computing Research Association – Education Committee (CRA-E) — 2016-2018

Recipient of IEEE BHI/NSF Student Travel Award — 2018

Ethical Leader in STEM Fellow (NSF Funded graduate leadership program — 2015-2016

NSF Graduate Research Fellowships (GRFP) – Honorable Mention — 2015

Featured of cover page of Big Data Journal – Article: Does Medical School Training Relate to Practice? Evidence from Big Data, — 2015

Kaneb Center for Teaching & Learning Certificates
Striving for Excellence in Teaching — 2015
Teaching Well Using Technology — 2015
Advanced Teaching Scholar — 2016

Recipient of IEEE BIBM Student Travel Award — 2014

Best Paper Nominee – Scaling Personalized Healthcare with Big Data — 2014

Recipient of Outstanding TA Award — 2013

Upsilon Pi Epsilon Inductee- Computer Science Honor Society — 2013-2018

First place mobile app development class for work on NICU analytics
Presented to Notre Dame University Council for Academic Technologies — 2012

2nd place Four Horsemen (Entrepreneurship & Innovation Society) PITCH Competition — 2012

Trainee/Mentee Honors and Awards

Ryan Lee (KCUMB): 2023
Top 4 Abstracts – Nexus Informatics 2023 "A Computational Framework to Improve Matching in Case-Control Study Designs"

Nicholas Kwok (CSMS): 2022
2nd Place (Residents – Innovation) ACP S. California Regions I, II and II Poster Competition "It's Hot; Is it COVID? Hot Weather and Excessive Testing for COVID-19"

Yasasvhinie Santharam (KCUMB): 2022
2nd place Clinical Research Category at National SOMA Spring Research Symposium "Increased Prevalence of Parenteral Nutrition Associated Liver Disease in Neonates with Congenital Heart Disease

Parth Patel & Shil Shah (UMKC SOM): 2021
Poster selected by UMKC IM program for presentation at Missouri ACP'21 meeting "Predicting Recurrent Coarctation of the Aorta in Infants with Single Ventricle Heart Disease Using Home Monitoring Data".

Parth Patel & Shil Shah (UMKC SOM): 2021
1st place Undergraduate Poster Presentation UMKC Health Sciences Student Research Summit (HSSRS) "Predicting Recurrent Coarctation of the Aorta in Infants with Single Ventricle Heart Disease Using Home Monitoring Data".

Madhavi Murali (UMKC SOM IV): 2020
1st place undergraduate oral presentation UMKC Health Sciences Student Research Summit (HSSRS) "Challenges of interpreting Naranjo causality assessment of pediatric adverse drug reactions".

Yonatan Kurland (CMKC Neonatology Fellow): 2020
2nd place Fellows Research Day Award CMKC Research Days Health Sciences Student Research Summit (HSSRS) "Neurally Adjusted Ventilatory Assist in Neonates with Congenital Diaphragmatic Hernia".

Yonatan Kurland (CMKC Neonatology Fellow): 2020
CHNC: Outstanding Abstract by a Trainee Children's Hospitals Neonatal Consortium Annual Research and Quality Symposium "Neurally Adjusted Ventilatory Assist in Neonates with Congenital Diaphragmatic Hernia".

Teaching Experience

Children's Mercy:

Lecturer:

Course	Lecture Name	Audience	Year
MEDB5520 - Intro to Medical Informatics	An introduction to Natural language Processing	Graduate Students UMKC Department of Biomedical Health Informatics	2021,2022, 2023

University of Notre Dame:

Instructor of Record - Healthcare Analytics: (**CIF 4.6**) University of Notre Dame

- Designed course curriculum for 23 undergraduate and masters' students.
- Prepared and delivered lectures focused on the modern statistical and machine learning techniques designed to address the complex nature of health data.
- Created interactive labs allowing hands on experience using techniques surrounding the preparation, modeling, and interpretation of a large real-world electronic health record data.

Fall 2018

Interim Instructor – Data Science: University of Notre Dame

- Selected by the department chair to act as an interim instructor while the current instructor was unavailable to teach.
- Created and delivered course material covering data exploration, preprocessing, cleaning, and introduced rule-learners over the first six sessions of the semester.

Fall 2017

Volunteer Teacher– Summer Coding: Stanley Clark School, South Bend

- Created and instructed a weeklong course introducing students to basic programming concepts.
- Worked 1-1 and in groups with students ranging from 6th to 8th grade.

Summer 2014

Teaching Assistant– Healthcare Analytics: University of Notre Dame

- Responsible for grading and providing feedback on quizzes, assignments and project milestones.
- Devised assignments, and managed class materials.
- Provided lectures in professors absence.

Fall 2013

Mentorship Activities

Children's Mercy:

Student	Affiliation	Outcome	Term
Ryan Lee	KCUMB Medical Student	Abstract Nexus Informatics'23 (Award) Manuscript In Preparation	Summer 2022-Present
Parth Patel & Shil Shah	(UMKC SOM)	Poster presentation at *Missouri ACP'21* (Award) Manuscript Under Review	Summer 2021-Present
Eric Duong	Winnetonka High School ML Research: AP Research Seminar	Passing grade for college credit	2021
Yasasvhinie Santharam	KCUMB Medical Student	Manuscript published in JPEN	Summer 2021-Spring 2023
Spandana Sama	KCUMB Medical Student	Ongoing research: Neonatology	Summer 2020 – Present

Michelle Klueppelberg	KCUMB Medical Student	Ongoing research: Neonatology	Summer 2020 – Present
Nathália Munck Machado	Visiting Scholar, PhD Candidate: KUMC Dept. of Population Health	Manuscript published in Nicotine & Tobacco Research	Spring 2020 – Spring 2022
Madhavi Murali	UMKC Medical Student	Manuscript published in PLOS One	Spring 2020 – Fall 2020
Fredy Nheme	Master's student: UMKC Dept. of Biomedical and Health Informatics	Manuscript published in Digestive Diseases and Sciences	Spring 2020

Cedar's Sinai Medical Center:

Student	Affiliation	Outcome	Term
Nicholas Kwok	PGY-2 Department of Internal Medicine Cedars-Sinai	ACP Regional Abstract (award), Manuscript in preparation	Summer 2022-Present

University of Notre Dame

Student	Affiliation	Outcome	Term
Mariana Suarez	Notre Dame: Science Computing Undergraduate	Manuscript in Preparation	Fall 2018-Spring 2019
Karthik Pansetty	Summer Researcher (IIT Gandhinagar)	Manuscript in Preparation	Summer 2018-Summer 2019
Catherine Markley	Notre Dame: Computer Science Undergraduate	Full conference manuscript accepted at IEEE BHI 2019	Fall 2017 – Spring 2019
Matthew Schoenbauer	Notre Dame: ACMS Undergraduate	Community census app piloted by Centre for Nutritional Recovery and Education (CREN)	Spring 2019
Christopher Giuffrida	Notre Dame: Computer Science Undergraduate	Community census app piloted by Centre for Nutritional Recovery and Education (CREN)	Fall 2018
Shuyang Li	Notre Dame: Computer Science Undergraduate	Community pilot run in Bendix Clinic, and poster accepted to AMIA Informatics Summit 2015	Fall 2014-Spring 2015
Mayank Shekhar	Visiting Summer Researcher (IIT Gandhinagar)	Community pilot launched at 2 South Bend schools, and poster accepted to AMIA Informatics Summit 2015	Summer 2014
Jacob Rebec	High School Student Researcher	Academic Research Experience	Spring 2014

Other Mentorship Activities:

Class	Affiliation	Role	Term
Neuroscience Class	UMKC SOM Undergraduate Class	Statistical Project Mentor (3 groups [~15 students] /yr)	Annually, Fall 2019, 2020, 2021, 2022

Dissertation Committees

Student	Title	Placement	Year
Xi Wang	Social determinants of health, allostatic load, and GDM: a PLS-SEM analysis		Ongoing-
Louis Faust	Modeling Physiological and Behavioral Data Streams Towards Health Insights	Mayo Clinic Research – Data Scientist	June 2020
Xian Wu	Deep Learning for Sensory and Behavioral Time Series Analysis	Pinterest Research	March 2020

Master's Thesis / Candidacy Committees

Student	Title	Placement	Year
Louis Faust	Physiological & Behavioral Data Streams Towards Health Insights	PhD Candidate Notre Dame	March 2019
Xian Wu	Deep Learning for Time Series Analysis: from Methodology to Applications	PhD Candidate Notre Dame	April 2019

Postdoc Mentorship Committees:

Trainee	Affiliation	Years	Current Position
Paul Hibbing	Center for Healthy Lifestyles and Nutrition, Children's Mercy Kansas City	2020-2022	Assistant Professor University of Illinois Chicago

Grants and Contract Awards

Active Funding:

AHA Transformational Project Award **Feldman (PI)** **$300,000** **07/01/2023 – 06/30/2026**

Risk Factors for Fontan Associated Liver Disease: A Computational Framework to Improve Matched Case- Control Study Design

Major Goal(s): To identify early life risk factors Fontan Associated Liver Disease among the complex array of care provided to infants with single ventricle heart disease. Drawing on advances in the field of representation learning, this proposal will develop a computational framework to identify optimal control subjects to a given case based on all available patient data to reduce confounding from unmatched factors. Extending the framework to use temporally aware models, it will further improve matching by accounting for temporal relations in patient's medical histories. Then, by replicating MCC studies with various matching algorithms, this proposal will quantify the effects of matching alignment on the precision of analyses performed in a given study.

Role: PI

Children's Mercy Patient Care Services **Hansen (PI)** **$ 4,200** **5/1/23-6/1/23**
Depression Screening in a Fetal Care Center
Major Goal(s): Study depression risk for patients whose pregnancy is complicated by fetal anomaly. Primary aims include 1) Determining prevalence and characteristics of positive depression screens in a local fetal care center population and 2) Identifying risk-factors profiles for depression and failure to utilize provided resources.
Role: Primary Mentor

NOT-OD-22-067 NIMHD **Grundberg (PI)** **$ 193,545.00** **05/01/2022 – 04/30/2023**
Contextualizing and Addressing Population-Level Bias in Social Epigenomics Study of Asthma in Childhood
Major Goal(s): The goals of this supplement will support effective use of the parent R01 collected dataset involving the psychosocial factors and epigenetic modifications of an African American population in AI/ML models by quantifying representativeness of the data collected with respect to communities which it was drawn and provide an empirical approach imputing missing data accounting for sociodemographic variability between participants.
Role: Co-I (Supplement Lead)

R01 DK132350-01 NIDDK **Berkley-Patton & Carlson (MPIs)** **$2,702,447** **4/1/2022-03/31/2026**
Impacts of City-Wide Zero-Fare Bus Transit on Ridership, Physical Activity, Health Determinants, and Diabetes-Related Health Outcomes: A Natural Experiment
Major Goal(s): The goal of this project is to evaluate the impacts of a new policy that eliminates bus fare on changes in bus ridership, physical activity, health markers, and social determinants. In response to RFA-DP-20-002 Natural Experiments of the Impact of Population-targeted Policies to Prevent Type 2 Diabetes and Diabetes Complications.
Role: CO-I

Kenneth & Eva Smith CMKC Award **Feldman (PI)** **$48,569** **10/1/2022-09/31/2023**
A Generalized Framework for Identifying Outcome-Driven Sequences in Noisy Temporal Health Data with Higher-Order Networks
Major Goal(s): The goal of this proposal is to develop methodology able to identify trajectories of Bronchopulmonary Dysplasia (BPD) for infants admitted to the neonatal intensive care unit on mechanical invasive ventilation while automatically determining and ignoring unrelated data. This proposal will also identify deviation points along a trajectory, where the likelihood of reaching a severe outcome has become significantly more or less and may serve to as potential intervention points to maintain low-risk trajectories.
Role: PI

Philanthropic Impact Team Fund- I Love Children's Mercy Award **Erickson (PI)** **$752,000** **4/1/22-6/30/23**
Remote Health Solutions Research, Implementation and CHAMP app Expansion
Major Goal(s): This proposal takes CHAMP app and Remote Health Solutions into a next phase of implementation with providing much needed equipment at home (Scales, monitors, iPad), continued upgraded software so we are start of the art (Xamarin to Maui from Microsoft pipeline), updating our support for families in transition home with medically complex kids with our work with adherence and transition home, and the expanded research projects and ongoing scaling and spread of CHAMP from Cardiac High Acuity monitoring Program to Children's Mercy High Acuity Monitoring Program (CHAMP app).
Role: CO-I

U01FD007220 **Critical Path Institute** **$5,097,328** **09/01/2020-08/31/2023**

Advancing Standards and Methodologies To Generate Real World Evidence From Real World Data Through A Neonatal Pilot Project
Role: Contract - ($55,197 to CM PI Feldman**)**

Complete:

C-S Precision Health **Pevnick (PI)** **$ 90,000** **03/01/20 – 03/01/21**
Identifying Occult Atrial Fibrillation: Linking Electronic Health Record and Apple Watch Data:
Major Goal(s): As part of a collaboration with researchers at Cedars Sinai (C-S) hospital, this project is focused on studying how clinical data (e.g., medical histories, demographics, medication usage, and labs) can be used in tandem with heart-rate data obtained from consumer wearables to better identify high-risk patients for AFib
Role: CMH Subaward PI (20k CMH)

UL1TR002366 **Feldman (PI)** **$ 23,597** **07/01/20 – 06/30/21**
NCATS
Design of a computational framework to improve the quality of subject matching in case-control study designs.
Major Goal(s): Develop a computational framework to empirically identify the optimal matched control subject(s) for a specific "case" in retrospective case-control studies. Assess the possibility to further improve matching by accounting for temporal relations in patient's medical histories. Evaluate differences between computationally- and manually- selected control patients in the context of a previously conducted case-control study.
Role: PI

Children's Mercy Patient Care Services **Lysaught (PI)** **$ 5,000** **5/1/20-6/1/21**
The SSSH's: SNOO Smart Sleeper Use in Post-Operative Infants with Congenital Heart Disease
Major Goal(s): Determine the feasibility of utilizing the SNOO Smart Sleeper in post-operative care for infants with congenital heart conditions. Primary aims included 1) Determining implementation requirements, challenges, and potential of utilizing the device 2) Assessing the ability to perform reliable cardiopulmonary monitoring given devices movement and positioning requirements and 3) Evaluating potential to measure and physiologic trends during use and link data to existing local EMR systems
Role: CO-I

CMH Innovation Grant **Chan (PI)** **$ 30,000** **9/1/20-5/31/21**
Saving Liver Transplants with Machine Learning
Major Goal(s): This proposal will develop more accurate ultrasound measures for vascular complications, utilizing state-of-the-art machine learning methodologies to extract latent information from patient ultrasounds with the overarching goal of minimizing unnecessary invasive procedures.
Role: CO-I

Pending:

PA-20-185 **Pevnick, Feldman (MPI)** **$3,789,652.00** **04/01/2023 – 03/30/2028**
NIA
Encounter-Specific Body Temperature Reference Ranges to Improve the Diagnosis of Infection in Older Adults: Derivation, Validation, and Comparison to Current Decision-Making
Major Goal(s): This project will develop and validate a computational a technique to estimate Precision Temperature Reference Ranges (PTRR) for an individual's healthy body temperature accounting for relationships between demographic, clinical and environmental factors at the time of measurement. We will validate discriminative capacity of PTRR in identifying patients with pathology known to cause fever or hypothermia, locally, and at an external site. We will assess the potential impact of using this capacity on care processes and patient outcomes as compared to existing thresholds and finally investigate how this new information is viewed and understood by current clinicians through a series of vignettes and focus groups.
Role: MPI

Invited Talks

Feldman, K. (2023, May). *Advancing Computational Health Research at CM: Representation, Risk, and Context.* Division of Research Informatics, Children's Mercy, Kansas City, MO.

Feldman, K. (2023, February). *Contextualizing Data and Improving Computational Patient Representations in the Context of Learning Health Systems.* University of Tennessee Health Science Center Lecture Series in Population and Precision Health

Feldman, K. (2022, December). *The Job Talk: Practical Tips for Crafting a 1-hour Narrative of You as a Researcher, Collaborator, and Potential Future Colleague.* KUMC Postdoc Association Career Development Workshop

Feldman, K., Pevnick, J., (2022, November). *Beyond Modeling: The Role of Informatics in Advancing Healthcare Knowledge.* UCSD DBHI - Biomedical Informatics Seminar

Feldman, K. (2022, April). *A Computational Framework to Improve Matching in Case-Control Study Designs.* IDAD: Frontiers in Biostatistics & Data Science

Feldman, K. (2021, May). *Will Apple Watches' Passive Atrial Fibrillation Detection Prevent Strokes? Estimating Actionable Cohort Sizes for Anticoagulation Therapy with Real-World User Data.* Cedars-Sinai EIS Journal Club (CME Credit)

Feldman, K. (2021, April). *The Healthcare Data Spectrum: Utilizing Multiple Data Sources to Address Novel Healthcare Questions.* Nexus Informatics Conference, Kansas City, MO.

Feldman, K. (2020, November). *Natural Language Processing in Healthcare: A Brief Introduction to the Challenges and Techniques in a Complex Pipeline*. Department of Biomedical and Health Informatics multidisciplinary seminar. UMKC School of Medicine, Kansas City, MO.

Feldman, K. (2020, July). *Beyond Modeling: The Emergent Role of Informatics in Advancing Healthcare Knowledge*. Academic Scholarship Conference, Children's Mercy Kansas City, MO.

Feldman, K. (2020, April). *The Healthcare Data Spectrum: Utilizing Multiple Data Sources to Address Novel Healthcare Questions.* 5th Annual Nexus Informatics Conference, Kansas City, MO. (Canceled due to COVID-19)

Feldman, K. (2020, March). Beyond Modeling: *The Emergent Role of Informatics in Advancing Healthcare Knowledge*. CMH/KU Center for Children's Healthy Lifestyles & Nutrition, Kansas City, MO.

Feldman, K. (2020, February). *Beyond Modeling: The Emergent Role of Informatics in Advancing Healthcare Knowledge*. KU Tobacco Research Group / Population Health, Kansas City, MO.

Feldman, K. (2019, February). *A Brief Introduction to Text Analysis*. CMH/KU/Others Biostatistics & Epidemiology Colloquium, Kansas City, MO.

Feldman, K. (2016, April). *The Role of Informatics in Nursing*. Saint Mary's College, Graduate Program in Nursing, South Bend, IN

National Service

Editorial Board:

Journal	Year(s)
Journal of Parenteral and Enteral Nutrition	2023 – present
Discover Data	2023 – present

Program Committee:

Conference	Year(s)
WSDM	2022
TheWebConf | Health on the Web / Web and Society Tracks	2021, 2022, 2023
Artificial Intelligence in Medicine (AIME)	2020, 2022
International Workshop on Health Intelligence	2021, 2022, 2023
BIGDATA4HEALTH	2017

Reviewer:

Venue	Year(s)
Journal of Parenteral and Enteral Nutrition (JPEN)	2023
International Journal of Data Science and Analytics	2023
Journal of Clinical Nursing (JCN)	2023
Journal of Advanced Nursing (JAN)	2022, 2023
Children	2022
Elsevier Book Proposal	2021
Journal of Maternal-Fetal & Neonatal Medicine	2021
Journal of Artificial Intelligence Research	2021
Journal of Clinical Medicine	2021
Healthcare	2021
Transactions on Big Data	2020
BMC Health Services Research	2020
AMIA – Annual Symposium	2020, 2023
Transactions on Knowledge and Data Engineering (TKDE)	2015, 2018, 2019, 2020, 2022

IEEE Access	2017, 2019
Artificial Intelligence in Medicine	2019, 2020
Journal of Biomedical Informatics	2015, 2018, 2021
Scientific Reports	2016, 2019, 2020
Journal of Biomedical and Health Informatics	2016
Big Data	2015
Transactions on Knowledge Discovery from Data (TKDD)	2014, 2021
Statistical Analysis and Data Mining	2014
AMIA's Clinical Informatics Conference	2021
AMIA Joint Summits on Translational Science	2015 - 2022

Regional Service

Activity	Location	Year(s)
Member	CTSI (Frontiers) Team Science Advisory Board	2023-present
Reviewer	CTSI (*Frontiers*) TL-1 Proposal Reviewer	2023
Member	Fall PLTW Biomedical Sciences Advisory Meeting (Grain Valley High School)	2021
Judge	UMKC SOM Health Science Student Research Summit (HSSR)	2020, 2021, 2022
Judge	Project Lead the Way: High School Biomedical Research	April 2020, 2021, 2022
Judge	Northern Indiana Regional Science & Engineering Fair	February 2016

Intuitional Service

Children's Mercy Kansas City

Activity	Year(s)
CM Faculty Scholarship Committee	2021 – present
Judge Graduate Medical Education – Research Days	2023
Responsible Conduct of Research – Collaborative Science Presenter	2023
DOP Awards Committee	2021, 2022

Reviewer: Office of Faculty Development – 2021 PAS Practice Session	2021
Reviewer Innovation Incubator Awards	April 2021
Reviewer Internal Grants	Summer 2020
Informatics writing team CTSA renewal grant	Aug 2020 – Dec 2020
Researcher Brainstorming Strategic Plan: Value & Differentiation	July 2020

University of Notre Dame:

Activity	Year(s)
Graduate Mentor	Aug 2017 – Aug 2019
Dept. Representative to the Graduate Student Union	Dec 2015 – Aug 2018
Computer Science Graduate Student Board Member	Aug 2017- Aug 2018

Peer Reviewed Publications

‡ Student / Trainee Author, *Co-first authors

Journal Articles:

Marchese, D. L., **Feldman, K**., Sinn, C., Javaid, S., Jaffe, A., Katz, E., ... & McLaughlin, M. J. 2023. Rehabilitation Outcomes in Children with Acute Flaccid Myelitis from 2014 to 2019: A Multicenter Retrospective Review. Pediatric Neurology. PMID: 37271056

Feldman, K., Asta, K., Gearhardt, A.N., Sturza, J.M., Appugliese, D., Miller, A.L., Rosenblum, K., Kong, K.L., Crandall, A.K. and Lumeng, J.C., 2023. Characterization of a Vigorous sucking style in early infancy and its predictive value for weight gain and eating behaviors at 12 months. *Appetite*. PMID: 36898582

Santharam, Y., Nitkin, C.R., Rajgarhia, A., Oschman, A., Lee, B., Fischer, R. and **Feldman, K**., 2023. Association between Congenital Heart Disease and Parenteral Nutrition-Associated Liver Disease in Neonates: A retrospective cohort study. *Journal of Parenteral and Enteral Nutrition*. PMID: 36772965

Feldman, K., Baraboo, J., Dinakarpandian, D. and Chan, S.S., 2022. Machine Learning Algorithm Improves the Prediction of Transplant Hepatic Artery Stenosis or Occlusion: A Single-Center Study. *Ultrasound Quarterly*, pp.10-1097. PMID: 36103456

Feldman, K., and Rohan, A.J., 2022. Data-Driven Nurse Staffing in the Neonatal Intensive Care Unit. *MCN: The American Journal of Maternal/Child Nursing*, pp.10-1097. PMID: 35960217

Feldman, K., Nitkin, C.R., Cuna, A., Oschman, A., Truog, W.E., Norberg, M., Nyp, M., Taylor, J.B. and Lewis, T., 2022. Corticosteroid Response Predicts Bronchopulmonary Dysplasia Status at 36 Weeks in Preterm Infants Treated with Dexamethasone: A Pilot Study. *Pediatric Pulmonology*. PMID: 35434928

‡Machado, N.M., **Feldman, K.**, Amaral, L., Telmo, MR. and Richter, K.P., 2022. Vaping, perceptions of vaping, and plans to quit among e-cigarette users in the United States and the United Kingdom. *Nicotine & Tobacco Research*. PMID: 35380698

Feldman, K., Duncan, R.G., Nguyen, A., Cook-Wiens, G., Elad, Y., Nuckols, T. and Pevnick, J.M., 2022. Will Apple devices' passive atrial fibrillation detection prevent strokes? Estimating the proportion of high-risk actionable patients with real-world user data. *Journal of the American Medical Informatics Association*. PMID: 35190832

Feldman, K., Kearns, G.L., Pearce, R.E., Abdel-Rahman, S.M., Leeder, J.S., Friesen, A., Staggs, V.S., Gaedigk, A., Weigel, J. and Shakhnovich, V., 2022. Utility of the 13C-pantoprazole breath test as a CYP2C19 phenotyping probe for children. *Clinical and Translational Science*. PMID: 35099109

‡Shwaish, N.S., Malloy-Walton, L., **Feldman, K**., Teson, K.M., Watson, J.S., Yeh, H.W. and White, D.A., 2022. Heart rate recovery following exercise testing in pediatric patients with acyanotic repaired congenital heart disease. *Pediatric Cardiology*, pp.1-6. PMID: 34981139

Staggs, V. S., & **Feldman, K.** (2021). Use of between-within degrees of freedom as an alternative to the Kenward–Roger method for small-sample inference in generalized linear mixed modeling of clustered count data. *Communications in Statistics-Simulation and Computation*, 1-11.

Patton, S.R., **Feldman, K**., Majidi, S., Noser, A. and Clements, M.A., (2021). Identifying HbA1c Trajectories and Modifiable Risk Factors of Trajectories in 5-9-year-olds with Recent-Onset Type 1 Diabetes from the United States. *Diabetic Medicine*, p.e14637 PMID: 34240466

Feldman, K., Rohan, A.J. and Chawla, N.V., (2021). Discrete Heart Rate Values or Continuous Streams? Representation, Variability, and Meaningful Use of Vital Sign Data. *CIN: Computers, Informatics, Nursing*. PMID: 34747895

‡Kurland, Y., Gurung, K., Pallotto, E.K., Manimtim, W., **Feldman, K**., Staggs, V.S. and Truog, W., (2021). Neurally adjusted ventilatory assist in neonates with congenital diaphragmatic hernia. *Journal of Perinatology*, pp.1-6. PMID: 34112964

‡Faust, L., **Feldman, K**., Lin, S., Mattingly, S., D'Mello, S., & Chawla, N. V. (2021). Examining Response to Negative Life Events through Fitness Tracker Data. *Frontiers in Digital Health*, 3, 37. PMID: 34713131

‡Murali, M., Suppes, S. L., **Feldman, K**., & Goldman, J. L. (2021). Utilization of the Naranjo scale to evaluate adverse drug reactions at a free-standing children's hospital. *PloS one*, 16(1), e0245368. PMID: 33439905

Tillman, E. M., Suppes, S. L., **Feldman, K**., & Goldman, J. L. (2020). Enhancing Pediatric Adverse Drug Reaction Documentation in the Electronic Medical Record. *The Journal of Clinical Pharmacology*. PMID: 32776356

‡Nehme, F., & **Feldman, K**. (2020). Evolving Role and Future Directions of Natural Language Processing in Gastroenterology. *Digestive diseases and sciences*, 1-12. PMID: 32107677

‡Faust, L., **Feldman, K**., Mattingly, S. M., Hachen, D., & Chawla, N. V. (2020). Deviations from normal bedtimes are associated with short-term increases in resting heart rate. *NPJ digital medicine*, *3*(1), 1-9. PMID: 32219180

Feldman, K., Solymos, G. M., de Albuquerque, M. P., & Chawla, N. V. (2019). Unraveling complexity about childhood obesity and nutritional interventions: Modeling interactions Among psychological factors. *Scientific Reports*, *9*(1), 1-10. PMID: 31827160

*Faust, L., ***Feldman, K**., & Chawla, N. V. (2019). Examining the weekend effect across ICU performance metrics. *Critical Care*, *23*(1), 207. PMID: 31171026

*Gonya, J., ***Feldman, K**., Brown, K., Stein, M., Keim, S., Boone, K., ... & Butter, E. (2018). Human interaction in the NICU and its association with outcomes on the Brief Infant-Toddler Social and Emotional Assessment (BITSEA). *Early human development*, *127*, 6-14. PMID: 30218893

Gonya, J., Harrison, T., **Feldman, K**., Stein, M., & Chawla, N. (2019). Nursing networks in the NICU and their association with maternal stress: A pilot study. *Journal of nursing management*, *27*(2), 442-449. PMID: 30238539

Feldman, K., Johnson, R. A., & Chawla, N. V. (2018). The state of data in healthcare: path towards standardization. *Journal of Healthcare Informatics Research*, *2*(3), 248-271.

Feldman, K., Kotoulas, S., & Chawla, N. V. (2018). TIQS: Targeted Iterative Question Selection for Health Interventions. *Journal of Healthcare Informatics Research*, *2*(3), 205-227.

Feldman, K., Faust, L., Wu, X., Huang, C., & Chawla, N. V. (2017). Beyond volume: the impact of complex healthcare data on the machine learning pipeline. In *Towards Integrative Machine Learning and Knowledge Extraction* (pp. 150-169). Springer, Cham.

Feldman, K., Stiglic, G., Dasgupta, D., Kricheff, M., Obradovic, Z., & Chawla, N. V. (2016). Insights into population health management through disease diagnoses networks. *Scientific reports*, *6*, 30465. PMID: 27461860

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Thompson, R., Duvenick, N., Ricketts, A., Noel-MacDonnell, J., **Feldman, K.,** & Erickson, L. (2023) "SpO_2 Anomaly Detection to Predict CHAMP Interstage Interventions" *Nexus Informatics Conference, Kansas City, MO.*

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‡Kwok, N., **Feldman, K**., & Pevnick, J. (2022) "It's Hot; Is it COVID? Hot Weather and Excessive Testing for COVID-19" *Society of General Internal Medicine*

‡Kwok, N., **Feldman, K.**, & Pevnick, J. (2022) "It's Hot; Is it COVID? Hot Weather and Excessive Testing for COVID-19" *Southern California American College of Physicians*

‡Patel, P., ‡Shah, S., Files, M., McFarland, C., Ricketts, A., Hancock, H., **Feldman, K**., Erickson, L., & Romans, R. (2022) "Predicting Recurrent Coarctation of the Aorta in Hypoplastic Left Heart Syndrome Using Home Monitoring Data" *CHOP Cardiology 2022.*

Feldman, K., ‡Santharam Y., Rajgarhia A., Nitkin C., & Fischer R. (2022) "Increased Prevalence of Parenteral Nutrition Associated Liver Disease in Neonates with Congenital Heart Disease" *Nexus Informatics Conference, Kansas City, MO.*

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Scherschligt, X., **Feldman, K**., Rouse, A., & Chan, S. (2021) "Identifying High-risk Patients for Hepatic Artery Stenosis and Occlusion Following Liver Transplants Using a Machine Learning Algorithm" *Society of Radiologists in Ultrasound Conference*

Feldman, K., Duncan, R., Nguyen A., Cook-Wiens, G., Elad, Y., Nuckols, Teryl., & Pevnick, J. (2021) "Will Apple Watches' Passive Atrial Fibrillation Detection Prevent Strokes? Estimating Actionable Cohort Sizes for Anticoagulation Therapy with Real-World User Data" *AMIA's Clinical Informatics Conference*

‡Machado, N., Richter, K., **Feldman, K**., Amaral, L., & Ronzani, T. (2021) "Intentions And Future Plans To Quit Vaping Among E-Cigarette Users In The US And UK" *Society for Research on Nicotine & Tobacco (SRNT)* Featured Presentation

Nitkin, C.*, **Feldman, K**.*, Cuna, A., Oschman, A., Truog, W., Norberg, M., Taylor, J., & Lewis, T. (2021) "Response to dexamethasone predicts diagnosis of severe (type 2) bronchopulmonary dysplasia or death" *Pediatric Academic Societies (PAS)*

Feldman, K., Pearce, R., Kearns, G.L, Leeder, S.J, Abdel-Rahman, S., Staggs, V., Friesen, A., Gaedigk, A., Weigel, J., & Shakhnovich, V. (2020) "13C-Pantoprazole Breath Test as a Phenotyping Probe for CYP2C19 in Children" *American Society for Clinical Pharmacology and Therapeutics (ASCPT)* (Poster) Recipient of a Top Poster Ribbon Honors on submission

‡Murali, M., Suppes, S. L., **Feldman, K.**, & Goldman, J. L (2020) "An evaluation of the Naranjo scale in assessing adverse drug reactions at a free-standing children's hospital" *Midwest Society for Pediatric Research (MSPR) (Poster)*

‡Kurland Y., Gurung, K., Staggs, V., **Feldman, K.**, Pallotto, E., Manimtim, W., & Truog, W. (2020) "Neurally Adjusted Ventilatory Assist in Neonates with Congenital Diaphragmatic Hernia" *Pediatric Academic Societies (PAS)*, (Presentation) – Canceled due to Covid-19

‡Onishchenko, E. Sandritter, T., **Feldman K**., Fischer, R., & August, K. (2020) "Identifying Risk Factors for Drug Induced Liver Injury in Pediatric Patients with Acute Lymphocytic Leukemia (ALL) Receiving Chemotherapy", American Society of Pediatric Hematology Oncology (*ASPHO)* (Poster) – Canceled due to Covid-19

Feldman, K., Rohan, A., & Chawla, N. V. (2017). "Manual, automated, or derived measures: The value of variability in the meaningful use of vital sign data." *AMIA iHealth Clinical Informatics Conference*. (Presentation)

Feldman, K., & Chawla, N. V (2015). "From Data to Insights." *INFORMS Healthcare*. (Presentation)

Feldman, K, et al. (2015) "Leveraging Technology to Assist in Management of Diabetic Conditions." *AMIA Joint Summits on Translational Science*. (Poster)

Local Meetings

Thompson, R., Ricketts, A., Noel-MacDonnell, J., **Feldman, K.,** & Erickson, L. A. (May 2023). "Exploring Pediatric Cardiac Readmissions in the Interstage Period Using the CHAMP Multi-Site Repository". *Children's Mercy Kansas City Research Days*, Kansas City, MO.

Lysaught, S., Erickson, Lori., Marshall, J., & **Feldman, K**., (2022) "The SSSH's: SNOO Smart Sleeper Use in Post-Operative Infants with Congenital Heart Disease" *Children's Mercy Kansas City Research Days*

Feldman, K., ‡Santharam Y., Rajgarhia A., Nitkin, C., & Fischer, R. (2022) "Increased Prevalence of Parenteral Nutrition Associated Liver Disease in Neonates with Congenital Heart Disease" *Kansas City University of Medicine and Biosciences Research Symposium*

Feldman, K., ‡Santharam Y., Rajgarhia A., Nitkin, C., & Fischer, R. (2022) "Increased Prevalence of Parenteral Nutrition Associated Liver Disease in Neonates with Congenital Heart Disease" *Children's Mercy Kansas City Research Days*

‡Patel, P., ‡ Shah, S., **Feldman, K.**, Erickson, L., Ricketts, A., Hancock, H., & Romans, R., (2021) "Predicting Recurrent Coarctation of the Aorta in Infants with Single Ventricle Heart Disease Using Home Monitoring Data" *UMKC Health Science Student Research Summit (Poster)*

‡Klueppelberg, M.*, ‡Sama, S.*, ‡Doxey, S., Younger, D., Smith, B., & **Feldman, K.** (2021) "Variability in Blood Gas Levels During Non-Invasive Ventilatory Support Following Planned Extubation and Association to 36-Week Bronchopulmonary Dysplasia in Preterm Neonates" *Kansas City University of Medicine and Biosciences Research Symposium*

‡Klueppelberg, M.*, ‡Sama, S.*, ‡Doxey, S., Younger, D., Smith, B., & **Feldman, K.** (2021) "Variability in Blood Gas Levels During Non-Invasive Ventilatory Support Following Planned Extubation and Association to 36-Week Bronchopulmonary Dysplasia in Preterm Neonates" *Children's Mercy Kansas City Research Days*

Feldman, K. (2020) "Beyond Modeling: Broadening the Role Of Informatics In Healthcare", Children's Mercy Research Month (Poster) – Canceled Due to COVID-19

‡Murali, M., Suppes, S. L., **Feldman, K.**, & Goldman, J. L (2020) "Challenges of interpreting Naranjo causality assessment of pediatric adverse drug reactions" *UMKC Health Science Student Research Summit (Presentation)*

Brown, K., **Feldman, K**., Chawla, N. V., Rumpf W., Ray, W, Boone, K., Keim, S., Nelin, L., Butter, E., & Gonya, J. (2017) “Effect of Mesosystemic Variability in the NICU on Early Autism Behaviors in Extremely Preterm Infants” *Nationwide Children’s Hospital Neonatal-Perinatal Conference*. (Poster)

Feldman, K., Rohan, A., & Chawla, N. V. (2017). "Manual, automated, or derived measures: The value of variability in the meaningful use of vital sign data." *Stony Brook University's School of Nursing Distinguished Alumni Award Symposium*, (Poster)
