**SECTION I**

*Updated 3/6/2023*

**A.  PERSONAL DATA**

|  |  |
| --- | --- |
| Name & Credentials | Katherine Ann Sward, PhD, RN, FAAN |
| Rank and Title  | Professor (with tenure) |
| Contact Information  | Office: Department of Biomedical Informatics 421 Wakara Way, Suite 140, SLC, UT 84108 (Suite 208 office 2011) College of Nursing office 5325C |
|  | Mail: College of Nursing 10 South 2000 East, SLC, UT 84112 |
|  | Phone: 801-585-1481 (office), 801-541-2968 (cell) |
|  | E-mail: kathy.sward@nurs.utah.edu |
| ORC-ID | 0000-0002-6568-4031 |
| Scopus Author ID | 22954497100 |
| eRA CommonsID | kathysward |

 **B. EDUCATION**

|  |  |  |
| --- | --- | --- |
| 1. Year | Degree | Institution (Area of Study/Specialization) |
| 2007 | PhD | University of Utah, Salt Lake City, UT (Nursing/Informatics). |
| 1998 | MS | University of Utah, Salt Lake City, UT (Nursing/Nursing Informatics) |
| 1990 | BS | Westminster College, Salt Lake City, UT (Nursing) |
| 1981 | Diploma | Lutheran Hospital School for Nurses, Moline, IL (Nursing) |

|  |  |
| --- | --- |
| 2. Licensure / Certification  |  |
| Registered Nurse | UT (22-209780-3102) |

**C. EMPLOYMENT / PROFESSIONAL EXPERIENCE**

|  |  |
| --- | --- |
| Dates | Position and Institution |
| 8/07 – present  | Faculty, tenure-line University of Utah College of Nursing, SLC, UT  Professor w tenure 2020 (current) Associate Professor w tenure 2014-2020;  Assistant Professor 2007-2014 |
| 2/2023 – present | Professor with tenure, Department of Biomedical Informatics, Sch of Med, U of U, SLC UT |
| 8/07 – 2/2023 | Adjunct faculty--Department of Biomedical Informatics, Sch of Med, U of Utah SLC, UT (*rank as per CON ranks.)* |
| 8/12 – 8/14  | Assistant Dean for Information & Technology--U of Utah College of Nursing, SLC, UT |
| 8/08 – 8/09 | Adjunct Assistant Professor--U of Nebraska Medical Ctr College of Nursing, Omaha, NB |
| 8/01 – 8/07 | Instructor, Clinical--University of Utah College of Nursing, SLC, UT  |
| 7/99 – 7/01 | Clinical Instructor (adjunct)--University of Utah College of Nursing, SLC, UT  |
| 7/98 – 7/01 | Computer Professional--University of Utah College of Nursing, SLC, UT |
| 12/97 – 6/98 | Teaching/Research Assistant--University of Utah College of Nursing, SLC, UT |
| 2/93 – 11/97 | Sr. Knowledge Engineer Mosby Consumer Health (Applied Medical Informatics), SLC, UT |
| 5/90 – 10/93 | Education Coordinator Pioneer Valley Hospital, West Valley City, UT |
| 1/89 – 5/90 | Staff Nurse Surgical ICU, University of Utah Hospital, SLC, UT |
| 3/88 – 1/89 | Assistant Head Nurse 6 South, University of Utah Hospital, SLC, UT |
| 5/82 – 3/88 | Charge Nurse 6 South, University of Utah Hospital, SLC, UT |
| 6/81 – 5/82 | Staff Nurse, Hammond Henry Hospital, Geneseo, IL |

**D. HONORS, RECOGNITIONS & AWARDS**

|  |  |  |
| --- | --- | --- |
| Year | Recognition | Received From |
| 2019-22 | Presidential Scholar | University of Utah |
| 2017 | Fellow | American Academy of Nursing |
| 2017 | *Reed M Gardner* Award for Faculty Excellence | U of Utah Dept Biomedical Informatics |
| 2014 | Excellence in Scholarship and Research | U of Utah College of Nursing |
| 2013 | Excellence in Mentorship | STTI Gamma Rho chapter |
| 2008 | Excellence in Teaching Award | STTI Gamma Rho chapter |
| 2007 | Outstanding Doctoral Student | U of Utah College of Nursing |
| 2006 | Excellence in Teaching Award | U of Utah College of Nursing |

**E. RESEARCH AND SCHOLARLY WORK**

1. Extramural Grants/Contracts

Current/Active (Funded)

|  |  |  |  |
| --- | --- | --- | --- |
| Dates | Amount | Title & Funding Agency | Role (PI, Co-PI…) |
| 09/23/2022-08/31/2027 | $604,783 (Y 1)$8,452,103 overall | HEAL ERN: Data Coordinating Resource Center. NIH: NCATS, NINDS U24TR004315 MPI: JM Dean, J Dwyer, K **Sward**, K Wattsubmitted budget $12,300,571 | PI (MPI) |
| 8/13/2021- 8/12/2026 | $4,825,930 (21-22)$12 million overall | Collaborative Pediatric Critical Care Research Network [DCC]. NIH: NICHD. PL1HD105462PI: JM Dean | Co-investigatorInformatics lead |
| 6/2020-2026 | $200,548 (20)$308,568 (21) | MATernaL and Infant NetworK to Understand Outcomes Associated with Treatment for Opioid Use Disorder during Pregnancy (MAT-LINK). CDC Public Health Informatics Institute PI-CD32-OPI MPI: Smid, Shakib | Co-Investigator |
| 9/17/2009 – 6/30/2024 | $4,123,496 | TRP Channels and Air Pollution. NIH/NIEHS. 5R01ES017431-10. PI: Reilly | Co-Investigator*starting 2021* |
| 3/30/2018-2/28/2023 | $3,826,184 | Utah Center for Clinical and Translational Science (CCTS). NIH/NCATS UL1TR002538MPI: Hess, Dere (Majersik)

|  |
| --- |
|  |

 | Key personnel/Co-I Biomedical Informatics Core;member IAC |
| 10/1/2016-9/31/2023 | $39,582,153 | Utah Trial Innovation CenterNIH/NCATS U24TR001597; HEAL pain ERN supplement:U24TR001597 S1PI: Dean | Co-investigatorProject lead for supplement aim 2 |
| 2022-2027 | $673,873 (Y1)$4,600,070 overall | University of Utah Biomedical Informatics Training Grant 5T15LM007124-25PI: Eilbeck | Co-Investigator |
|  |  |  |  |

Completed/Funded

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
| 9/30/2015 – 10/30/2020 | $5,529,663 | PRISMS Informatics Platform - Federated Integration Architecture. NIH/NIBIB. 1U54EB021973-01.  | PI (MPI w Facelli)(Contact PI) |
| 10/1/2016-10/30/2020 | $99,821 | PRISMS Informatics Platform - Federated Integration Architecture (administrative supplement 1) 3U54EB021973-01S1 | PI (MPI w Facelli)(Contact PI) |
| 10/14 – 10/20 | ~$5,000,000 | Data Coordinating Center for Collaborative Pediatric Critical Care Research Network. NICHD. 2U01HD049934-11. PI: Dean*Renewal 2021 under new funding mechanism* | Co-investigator(informaticist) |
| 5/1/2012-5/1/2018 | NA | Center for Clinical and Translational Science (CCTS), Biomedical Informatics Core. NIH/NCATS UL1TR001067 MPI: Byington, DereRenewal 2018 with different grant number | Informatics expert (beginning 10/2016) |
| 10/09 – 10/14 | $4,249,998 | Data Coordinating Center for the Collaborative Pediatric Critical Care Research Network. [Cycle II]. NICHD 5U01HD049934-06 PI: Dean | Co-investigator(informaticist) |
| 3/11 – 3/14 | $274,979  | Translating an Adult Ventilator Computer Protocol to Pediatric Critical Care. (R21). NICHD.1R21HD061870-01A2 | PI (MPI with Newth) |
| 10/04-9/08 | NA | University subcontract for “Re-engineering Clinical Research in Critical Care” (A. Morris, PI), NIH Roadmap contract HHSN268200425210C | Knowledge Engineer, Investigator |
| 9/00-6/04 | $1,710,831 | “BRCA1 Testing in a Large African American Kindred” (A. Kinney, PI), NIH National Human Genome Research Institute (R01 HG02241) | CATI Programmer/ Support |

Submitted, Pending

|  |  |  |  |
| --- | --- | --- | --- |
| Submitted | Status | Title | Role |
| 2022 Sept | Scored 21JIT in process | Utah Data Coordinating Center - Asian-American, Native Hawaiian and Pacific Islander Coordinating Center study. | Co-investigator (MPI Dwyer, VanBuren, Raphael) |
| 2022 Nov | Scored 22pending | Improving Access to Diabetes Information for Deaf and Hard of Hearing PopulationsG08 submitted to NLM | Co-investigator (PI Litchman) |
| 2022 June | SubmittedJIT received butlikely will NOT be funded | Trial Innovation Center (renewal), submitted to NCATS. | Co-investigator. (Dean, Dwyer, Scharfstein MPIs) |

Submitted, not funded

|  |  |  |  |
| --- | --- | --- | --- |
| 2023 Jan | Scored 41 (not funded) | Kidney trials – coordinating center | Co-investigator (MPI Dwyer, VanBuren, Raphael) |
| 2022 June | SubmittedNot funded | Candace Floyd – HEAL drug development study (BMIC submission). U19 | Key personnel (CDE expert) |
| 2022 June | Submitted (scored, not funded) | Reilly R35The Airway Epithelial TRP Network in AP Toxicity and Asthma Control | Co-investigator (PI Reilly) |
| 2021 July2021 Dec2022 June | Submitted, scored, not funded | Home Monitoring Intervention to Improve Care of Children with Medical Complexity (resubmission)NIH  | Co-investigator (Nkoy, PI) |
| 2021 Oct 1 | Submitted. Reviewed well but not selected for funding. Considering submission for phase 2 | Predictive Intelligence for Pandemic Prevention Phase I: Managing and Communicating Uncertainty to Contain Pandemics. Submitted to NSF. Submitted by dept of Epidemiology3i project. NSF 21-590 | Co-investigator (Khader, PI) |
| 2022 Feb | Scored (46), not funded | Incorporating the Exposome into Diarrheal Illness Analytics. RFA-AI-21-020. U01) Submitted to NIH/NIAID. $899,896 | Co-investigator (Cummins, Leung, MPI) |
| 2021 (June) | Submitted, not funded | Utah Coordinating Center for the Human Immunology Project Consortium (U-CHIPC) 3/1/22 – 2/28/2027 | Co-Investigator (Holubkov, Eilbeck – Pis) |
| 2021 June 10 | SubmittedScored 34(not funded) | FRonTIER: Frontier and Rural Tool for Informatics and Exposomic ResearchNIH – NCATS [R2D2] $20,229,288 | Co-Investigator (Cummins, Facelli, Stark – Pis) |
| 2021 | Submitted.Not funded | New Cohorts for Environmental Exposures and Cancer Risk (CEECR) Coordinating Center. RFA-CA-20-050[1U24CA265787-01](https://public.era.nih.gov/grantfolder/viewCommonsStatus.era?applId=10335683&urlsignature=v1$27144967$eracert168_ks$Sf5bTTkdLndKdKHSgW6jVgf2z4IKvtSc8Y35e1qpG4l6Xvi3JH94a8meFPhCYgXQLB9CueJNPLJ6AyKNizFvArnz384zOFceCLVmgLZis3XefQ8bpgOfVKGWUwsOGy8Qe86zZc2UzP79bLrC1J5_vBHcUggoPQ1SeyWrENDg1NFSI4jtTrGVfJYVLX-OhyUM9TJRT2glFCU4kiJ16uEMFPzjuONORkr0wZcjzsXEq5YgKpBVARrW8-iBrcLO4rq99WauQ7-lIkXfyuQj7bqkXEWKNqJIRKk_1_9Jzlc6fGYoFuT5YfbVSpYksFluW4dQUhoIkd_6Ma8b3lILCeHHXg..) | MPI (with Cook and Post) |
| 2020 | Submitted December 2020Not funded | Response to RFA-RM-20-015 Harnessing Data Science for Health Discovery and Innovation in Africa (DS-I Africa)Research Hubs. Collaborative U54 proposal with BMI, global health.  | Co-investigator (Facelli, local PI) |
| 2020 | Submitted Nov 2020Scored 34, not funded | Application 1 R01 AG072936-01, Refinement and testing of Symptom Care at Home (SCH) for older adult survivors of COVID-19. 1 R01 AG072936-01 | Co-investigator (Meek, PI) |
| 2020 | Submitted Nov 2020; Scored, not fundedResubmitted (see above) | Home Monitoring Intervention to Improve Care of Children with Medical Complexity | Co-investigator (Nkoy, PI) |
| 2020 | Submitted Oct 2020, not funded | Response to RFA-OD-20-013 Emergency Awards: RADx-UP Coordination and Data Collection Center (CDCC) (U24 Clinical Trial Optional) | Co-Investigator (Cook, PI) |
| 2019, 2020 | Submitted, not funded. Resub Aug 2020 | Alderdan - CDMRP (pre-proposal accepted, full proposal submitted). DSS 10054315, submitted to DOD. Early Pressure Injury Prediction among Critical-Care Patients: A Machine-Learning Approach | Co-investigator / consultant/ mentor(Alderden, PI) |
| 2020 | Submitted Feb 2020. Not funded | Yaoundé Center for Epidemiological Modeling. USAID BRIDGE training proposal | Co-investigator (Negrette, PI) |
| 2020 | Submitted June 2020. Not funded | The Aging Exposome: Characterizing Bidirectional Effects of Exposures and Aging to W.M. Keck Foundation | Co-investigator (Facelli, Gouripeddi, PI) |
| 2019 | Not funded | Sleep apnea and air quality (Jay Kitt), Pending submission to NIBIB |  |
| 2019 | deferred | Smart and Connected Health (NSF) – with Gouripeddi, Kasera, Lundrigan.Preliminary submission but pulled application. Defer to December 2021 unless we split into other calls. |  |
| 2020 | Pending | Research Ethics proposal (RGE proposal) |  |
| 2020 | Pending – June? | Mollie, Guilherme. Opioid follow up |  |
| 2020-2025 | Not funded | Transformative R01NIH (with TIC) | Co-investigator (Erin Rothwell) |
| 2020-2022 | Not funded | Biomedical Data Translator: DevelopmentNCATS OTA-19-009 | Co-Investigator (Facelli/Gouripeddi) |
| 2019-2021 | Not funded. | Variation in Mortality and Lab Utilization Practices in Pediatric Intensive Care Units (Mahendra; UCSF). R21. Submitted to NHLBI. Considering resubmission. | Co-investigator  |
| 2018 | Not funded | Rethinking Cancer Caregiving Stress: A Dynamic Approach to Optimizing Personalized Support for Family CaregiversP01 application to NCI (Mooney, Ellington, PIs). Submitted 2018. Not funded. | Director of the Sensor, Bioinformatics, and Technology Core |
| 2/18-1/23 | Not funded | Overcoming barriers and etiological limitations to effective asthma care: a personalized medicine approach.P01 Center application (Reilly, PI) | Co-Investigator |
| 2017-2022 | Not funded | CoConet: a Coordinating Consortium and Network for CD2HNIH/NCATS (PI Ohno-Machado, UCSD; UT site PI Facelli) | Co-investigator |
| 2017-2018 | Not funded | OpenFurther: A service oriented architecture based semantically consistent multi-scale multi-model platform for genomic enhanced public health surveillance (CDC contract; Gouripeddi, Facelli PIs) | Co-investigator |

1. Intramural Grants/Contracts

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Dates | Amount | Status | Title & Funding Agency  | Role (PI, Co-PI) |
| 2021-22 | $3000 | Awarded | Modifying Symptom Care at Home app for tracking of long-COVID symptoms.College of Nursing Research committee | Co-investigator (Meek, PI) |
| 2020-2022 | $24701 | Awarded 4/15/2020 | “Characterizing Local COVID-19 Emergent Phenomenon and Mitigation using Computational Modeling”Special Emphasis: Emerging COVID-19/SARS-CoV-2 Research. Immunology, Inflammation, and Infectious Disease (3i) Initiative/Office of the Vice President for Research | Co-investigator (Facelli, PI) |
| 2020 | $6994 | Not funded | Incorporating Artificial Intelligence Algorithmic Bias Training into Three Different Educational Programs. University Teaching Grants. (Borbolla, PI) | Co-investigator |
| 2019-2021 | $12000 | Internally funded.  | Center of Excellence for Exposure Health Informatics (**Sward**, Gouripeddi, Facelli, MPI)2020 Received Internal U of U funding $6000/yr ($2K each from CON, BMI, and research admin [Dere])Keck Foundation (LOI declined)Resubmitted to Noorda Feb 2019 (declined)In discussion with Air Force Total Exposure Health program. 2022 Air force suspended TEH program. | PI (MPI) |
| 4/2020-4/2021 |  | Not funded. | Green and Healthy Homes, A Pilot study CTSA  | PI |
| 4/2020-4/2021 |  | Not funded | Environmental assessment. Proposal submitted to Green and Healthy Homes, SLC  | Co-PI (with Collingwood) |
| 2020-2021 |  | Not funded | Epilepsy home monitoring and enhanced provider management using a novel smart phone application, the electronic-SeizureTracker (e-Sei). CCTS.  | Co-I (Sweney, Nkoy) |
| 4/2018 – 4/2019 | $4256 | Funded, completed | Examining the Role of Informatics in Capturing, Analyzing, and Interpreting Patient-Generated Data for Precision Health. CON Research Committee + CON RITE group.  | PI |
| 7/2016-7/2019 | $50,000 | Funded, completed  | Automatic Self-Monitoring for Adolescent Depression - ASAP. PCH Foundation. (PI Guo) | Co-investigator (Mentor) |
| 2/2016-2/2018 | $7,500 | Funded, completed  | Coping with Labor: An algorithm for assessing labor pain. McGillis Foundation. (with L. Roberts).  | Co-PI |
| 9/2015 – 9/2016 | $29,944.03 | Funded, completed | Contraceptive use in women with chronic medical conditions: Prioritizing personalized reproductive planning in the “silos” of subspecialty care. CCTS/program in personalized healthcare. (Gawron, contact PI) | Co-PI (mentor) |
| 8/14-8/16 | $5000 | Funded, completed | Using Decision Science to Improve Protocol Adherence. David Bailly, PI (Dept of Peds)PCH Foundation Early Career Development Research Grant | Co-investigator (mentor) |
| 12/14 – 6/15 | $3000 | Funded, completed | Configurable platform for reporting of home-monitored vital signs. U of Utah/NSF I-corps grants (Bailly, PI) | Co-PI |
| 6/12 – 6/13 | $20000 | Funded, Completed | Nursing Home Quality Improvement: Assessing the Process (Towsley, PI). Deseret Health Group donation to UU College of Nursing | Co- PI |
| 4/08-4/11 | $4952 | Funded, Completed | caBIG Modeling of Case Report Form Data from NIH Roadmap ICU Insulin-Glucose Clinical Study. College of Nursing Research Committee | PI |
| 2003 | $5000 | Funded, Completed | Effects of a Computerized Pediatric Medicine Game of Content Mastery & Retention (S. Richardson & C. Maloney, PI). Primary Children’s Medical Center | Co-investigator |
| 2003  | $3,000 | Funded, Completed | “Trends in Nutrient Intake and Growth in Critically Ill Neonates” (PI: C. McDonald) Primary Children’s Medical Center | Co-Investigator |

1. Independent Research

|  |  |  |
| --- | --- | --- |
| Dates | Title | Role (PI, Co-PI) |
| 2016-20 | Portable Vital Signs device integration into EHR (Tuan, PI). Collaboration with NI department. Cancelled – changes in operational priorities. | Co-investigator |
| 2012-13 | picuGrid. Initial implementation of caBIG for a pediatric ICU registry in 8 US hospitals (w L. Frey and M. Dean). Funded by CPCCRN network protocol funds and U of Utah Department of Pediatrics | Co-PI |
| 2006 | Evaluation of UCARE AES implementation in the undergraduate nursing curriculum (with C. Gassert and G. Barnett) | Co-PI |
| 2006 | Patterns of noncompliance with recommendations from a computerized glucose/insulin protocol (PhD Dissertation) | PI |
| 2006 | Student Nurse Interface Evaluation of glucose software  | PI |
| 1999 | Optimizing Outcomes Reporting for Nurse Midwives (with L. Roberts) | PI |
| 1998 | Database Usability: Automation of the BirthCare/HealthCare Birth Log (MS Project) | PI |

**F. PUBLICATIONS & EDITORIAL EXPERIENCE**

(peer reviewed publications identified with \* and data based publications with #)

Books (or Chapters in Books)

\*# Gouripeddi R, Lundrigan P, Kasera S, Collingwood S, Cummins M, Facelli JC, & **Sward**, K. (2020). Exposure Health Informatics Ecosystem. In: Phillips KA, Dirk P. Yamamoto, LeeAnn Racz, editors. *Total Exposure Health*. 1st ed. CRC Press; p. 233–78. Available from: <https://www.taylorfrancis.com/>. Chapter available open-source at <https://www.taylorfrancis.com/chapters/oa-edit/10.1201/9780429263286-18>

\* **Sward**, K. (2014). Documentation. Chapter 9 In T.J. Mansen & J. Gabiola, *Patient Focused Assessment: The Art and Science of Clinical Data Gathering*. Upper Saddle River, NJ: Pearson Prentice Hall

Journal Publications

\*# Yang, R., Wang, H., Tracy, E. L., Jo, Y. J., Sward, K. A., Edelman, L. S., & Demiris, G. (2023). What is the relationship between falls, functional limitations, and depressive symptoms among Chinese older adults? The role of living alone*. Maturitas, 168,* 78–83. <https://doi.org/10.1016/j.maturitas.2022.10.007>
ePub Nov 4 2022 Available at https://www.maturitas.org/article/S0378-5122(22)00223-7/fulltext

\* Dean, J. M., & Collaborative Pediatric Critical Care Research Network (CPCCRN) Investigators (2022). Evolution of the Collaborative Pediatric Critical Care Research Network. *Pediatric critical care medicine : a journal of the Society of Critical Care Medicine and the World Federation of Pediatric Intensive and Critical Care Societies*, 10.1097/2CC.0000000000003098. Advance online publication. <https://doi.org/10.1097/PCC.0000000000003098>

\*# Burr, J. S., Johnson, A., Risenmay, A., Bisping, S., Serdoz, E. S., Coleman, W., **Sward**, K. A., Rothwell, E., & Dean, J. M. (2022). Demonstration Project: Transitioning a Research Network to New Single IRB Platforms. *Ethics & human research*, 44(6), 32–38. https://doi.org/10.1002/eahr.500149

\*# Horvat, C. M., Fabio, A., Nagin, D. S., Banks, R. K., Qin, Y., Park, H. J., Kernan, K. F., Canna, S. W., Berg, R. A., Wessel, D., Pollack, M. M., Meert, K., Hall, M., Newth, C., Lin, J. C., Doctor, A., Shanley, T., Cornell, T., Harrison, R. E., Zuppa, A. F., Reeder, R.W., **Sward, K**., Holubkov, R., Notterman, D., Dean, J.M., Carcillo, J.A., *Eunice Kennedy Shriver* National Institute of Child Health and Human Development Collaborative Pediatric Critical Care Research Network (2022). Mortality Risk in Pediatric Sepsis Based on C-reactive Protein and Ferritin Levels. Pediatric critical care medicine : a journal of the Society of Critical Care Medicine and the World Federation of Pediatric Intensive and Critical Care Societies, 10.1097/PCC.0000000000003074.
Advance online publication. https://doi.org/10.1097/PCC.0000000000003074

\* Morris, A. H., Horvat, C., Stagg, B., Grainger, D. W., Lanspa, M., Orme, J., Clemmer, T. P., Weaver, L. K., Thomas, F. O., Grissom, C. K., Hirshberg, E., East, T. D., Wallace, C. J., Young, M. P., Sittig, D. F., Suchyta, M., Pearl, J. E., Pesenti, A., Bombino, M., Beck, E., **Sward, K.,** … Berwick, D. M. (2022). Computer clinical decision support that automates personalized clinical care: a challenging but needed healthcare delivery strategy. *Journal of the American Medical Informatics Association : JAMIA*, ocac143. Advance online publication. https://doi.org/10.1093/jamia/ocac143

\*# Sarbhai A, Gouripeddi, R., Lundrigan, P., Chidambaram, P., Saha, A., Madsen, R., Facelli, J., **Sward**, K., Kasera, S. (2022). Utilizing a Blockchain for Managing Sensor Metadata in Exposure Health Studies. 2022 Intermountain Engineering, Technology and Computing (IETC), 1-6, doi: 10.1109/IETC54973.2022.9796689. <https://ieeexplore.ieee.org/document/9796689>

\*# **Sward**, K.A., Enriquez, R., Burr, J., Ozier, J., Roebuck, M., Elliott, C., Dean, J.M. *Consent Builder* - An innovative tool for creating research informed consent documents. *JAMIA Open*, 5(3), oac069, <https://doi.org/10.1093/jamiaopen/ooac069>

\* Cummins, M., Hardiker, N., Wang, J., Wilson, M., **Sward**, K., Chernecky, C., Roberts, D., & Heermann Langford, L. (2022). Social Determinants of Health: Data Standardization in Electronic Health Records. *Nursing Outlook*, 70(3), 528-534. https://doi.org/10.1016/j.outlook.2022.03.011

\* Lyons, A. M., Dimas, J., Richardson, S. J., & **Sward**, K. (2022). Assessing EHR Data for Use in Clinical Improvement and Research. *The American journal of nursing*, 122(6), 32–41. <https://doi.org/10.1097/01.NAJ.0000832728.09164.3f>

\*# Li, K., **Sward**, K., Deng, H., Morrison, J., Habre, R., Franklin, M., Chiang, Y. Y., Ambite, J. L., Wilson, J. P., & Eckel, S. P. (2021). Using dynamic time warping self-organizing maps to characterize diurnal patterns in environmental exposures. *Scientific reports*, *11*(1), 24052. <https://doi.org/10.1038/s41598-021-03515-1>
**preprint available** at https://assets.researchsquare.com/files/rs-87487/v1/72a0891c-7642-413d-9042-7220a744cc7c.pdf

\*# Li, K., Deng, H., Morrison, J., Habre, R., Franklin, M., Chiang, Y. Y., **Sward**, K., Gilliland, F. D., Ambite, J. L., & Eckel, S. P. (2021). W-TSS: A Wavelet-Based Algorithm for Discovering Time Series Shapelets. *Sensors (Basel, Switzerland)*, *21*(17), 5801. https://doi.org/10.3390/s21175801

\*# Tiase, V. L., Wawrzynski, S. E., **Sward**, K. A., Del Fiol, G., Staes, C., Weir, C., & Cummins, M. R. (2021). Provider Preferences for Patient-Generated Health Data Displays in Pediatric Asthma: A Participatory Design Approach. *Applied Clinical Informatics*, *12*(3), 664–674. https://doi.org/10.1055/s-0041-1732424

\*# Guo, J., Keeshin, B. R., Conway, M. Chapman, W. W., & **Sward**, K. A. (2021). A scoping review and content analysis of common depressive symptoms of young people. The Journal of School Nursing. May 2021. DOI: 10.1177/10598405211012680
Accepted April 2021, published online May 2021 <https://journals.sagepub.com/doi/pdf/10.1177/10598405211012680>

\*# Tiase, V. L., Hull, W., McFarland, M. M., **Sward**, K. A., Del Fiol, G., Staes, C., Weir, C., & Cummins, M. R. (2020). Patient-generated health data and electronic health record integration: a scoping review. *JAMIA open*, *3*(4), 619–627. https://doi.org/10.1093/jamiaopen/ooaa052

\* Morris, A. H., Stagg, B., Lanspa, M., Orme, J., Clemmer, T. P., Weaver, L. K., Thomas, F., Grissom, C. K., Hirshberg, E., East, T. D., Wallace, C. J., Young, M. P., Sittig, D. F., Pesenti, A., Bombino, M., Beck, E., **Sward**, K. A., Weir, C., Phansalkar, S. S., Bernard, G. R., … Berwick, D. (2021). Enabling a learning healthcare system with automated computer protocols that produce replicable and personalized clinician actions. *Journal of the American Medical Informatics Association* : JAMIA, 28(6), 1330–1344. https://doi.org/10.1093/jamia/ocaa294
 accepted 11/12/2020,published Feb 16 2021
View at https://academic.oup.com/jamia/advance-article/doi/10.1093/jamia/ocaa294/6139942

\*# Tiase, V.L., **Sward**, K.A., Del Fiol, G., Staes, C., Weir, C., & Cummins, M.R. (2021). Patient-Generated Health Data in Pediatric Asthma: An Exploratory Study of Providers' Information Needs. JMIR Pediatrics and Parenting. 4(1): e25413. DOI: 10.2196/25413 URL: <http://pediatrics.jmir.org/2021/1/e25413/>

\*# Martial, M.A., **Sward**, K.A., Morse, J.M., Wilson, A.R., Martial, C., Penney, D.S., & Nicolas, E. (2021). Anemia Management in Rural Haitian Children: A Mixed-Method Study. *Journal of Transcultural Nursing*. <https://doi.org/10.1177/1043659620986616>
View at: <https://journals.sagepub.com/doi/full/10.1177/1043659620986616>
accepted 12/14/2020 published 1/22/2021

\*# Mourani PM, Sontag MK, Williamson KM, et al. Temporal airway microbiome changes related to ventilator-associated pneumonia in children. *Eur Respir J*. 2021;57(3):2001829. Published 2021 Mar 18. doi:10.1183/13993003.01829-2020

\* Gouripeddi R, **Sward** K, Cummins M, Eilbeck K, LaSalle B, Facelli J. (2020). Reproducible informatics for reproducible translational research. *Journal of Clinical and Translational Science*, 4(s1), 66-67. doi:10.1017/cts.2020.221

\* **Sward**, K.A. & Dabbs, A.D.V. (2020). The expanding science of sensor technology in research. *Nursing Outlook* 68(6), 689-692 https://doi.org/10.1016/j.outlook.2020.07.009

\*# Yang, R. Plasek, J.M., Cummins, M.R., **Sward**, K.A. (2020). Predicting falls among community-dwelling older adults: A demonstration of applied machine learning. Computers, Informatics, Nursing: CIN. 2020/11/16 publish ahead of print. doi: 10.1097/CIN.0000000000000688. <https://journals.lww.com/cinjournal/Abstract/9000/Predicting_Falls_Among_Community_Dwelling_Older.99323.aspx>

\*# Yang, R., Wang, H., Edelman, L. S., Tracy, E. L., Demiris, G., **Sward**, K. A., & Donaldson, G. W. (2020). Loneliness as a mediator of the impact of social isolation on cognitive functioning of Chinese older adults. Age and ageing, 49(4), 599–604. <https://doi.org/10.1093/ageing/afaa020>

\* Tiase, V. L., Hull, W., McFarland, M. M., **Sward**, K. A., Del Fiol, G., Staes, C., Weir, C., & Cummins, M. R. (2019). Patient-generated health data and electronic health record integration: protocol for a scoping review. *BMJ open*, 9(12), e033073. <https://doi.org/10.1136/bmjopen-2019-033073>

\* Khemani, R.G., Hotz, J.C., **Sward**, K.A., & Newth, C.J.L. (2020). The role of computer-based clinical decision support systems to deliver protective mechanical ventilation. Curr Opinion Crit Care. 26(1):73-81. doi: 10.1097/MCC.0000000000000688.

\*# Gawron, L.M., Sanders, Jessica N., **Sward**, K., Poursaid, A.E., Simmons, R., Turok, D.K. Multi-morbidity and Highly Effective Contraception in Reproductive-Aged Women in the U.S. Intermountain West: A Retrospective Cohort Study. Journal of General Internal Medicine. 2019 Nov 7 epub ahead of print. doi: 10.1007/s11606-019-05425-5

\* Tiase, V. L., **Sward**, K. A., & Cummins, M. R. (2019). Navigating the Search for Patient Generated Health Data. *Studies in health technology and informatics, 264*, 1992. <https://doi.org/10.3233/SHTI190750>

\*# Gouripeddi, R., Tran, L., Madsen, R., Gangadhar, T. Mo, P., Burnett, N., Butcher, R., **Sward**, K., Facelli, J. (2019). An architecture for metadata-driven integration of heterogeneous sensor and health data for translational exposomic research. 2019 IEEE EMBS International Conference on Biomedical & Health Informatics (BHI), Chicago, IL, USA, 2019, pp. 1-4, doi: 10.1109/BHI.2019.8834657.

\*#**Sward**, K. (2019). Making the connection: Integrated sensor systems research. State of the Science Paper; proceedings of the Western Institute of Nursing 2019 Research Conference.

\*# Demiris, G., Iribarren, S.J., **Sward**, K., Yang, R., May, S. (2019). Patient Generated Health Data Use in Clinical Practice: A Review. *Nursing Outlook. 67*(4), 311–330. <https://doi.org/10.1016/j.outlook.2019.04.005>

# Luo, G., Stone, B.L., Koebnick, C et al. (2019).Using Temporal Features to Provide Data-Driven Clinical Early Warnings: Rationale and Methods. JMIR Research Protocols, 8(6), e13783. DOI: [10.2196/13783](https://doi.org/10.2196/13783); PMID: [31199308](https://www.ncbi.nlm.nih.gov/pubmed/31199308); PMCID: [6592592](https://www.ncbi.nlm.nih.gov/pmc/articles/6592592)

\*# Furlong-Dillard, J.M., Miller, B., **Sward**, K et al. (2019) The Association between Compliance and Weight Gain When Using a Feeding Protocol in Single Ventricle Patients; a Single Center Experience. Cardiol Young. 2019 May 28:1-8. doi: 10.1017/S1047951119000222. [Epub ahead of print]. PMID: 31133078

\*Gouripeddi R, Groat D, Abdelrahman SE, Cheatham T, Cummins M, Eilbeck K, LaSalle B, **Sward** K, Facelli JC. (2019). Development of a Competency-based Informatics Course for Translational Researchers. *Journal of Clinical and Translational Science* 2019; 3(S1), 66-67. doi:10.1017/cts.2019.

\*# Gouripeddi R, Facelli J, **Sward** K. (2019/10/1). Generating Spatiotemporal Records of Exposure for Utilization in Environment Epidemiology. *Environmental Epidemiology*, 3 (S1), 138-139

\*# Kalsy M, **Sward** K, Bray B, Redd A, Eilbeck K. Evaluating the relevance and clarity of the heart failure eMeasure implementation toolkit by using a web-based survey instrument. Ann Circ 2019, 4(1), 001-008. 2019/08/05

\*# Gouripeddi R, Miller A, Eilbeck K, **Sward** K, & Facelli J. Systematically integrating microbiomes and exposomes for translational research. Journal of Clinical and Translational Science 2019; 3(S1), 29-30. doi:10.1017/cts.2019.71

\*# Moore, J., Goffin, P., Meyer, M., Lundrigan, P., Patwari, N., **Sward**, K., Weise, J. (2018). Managing in-home environments through sensing, annotating, and visualizing air quality data. *Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies* (IMWUT)(Ubicomp '18). Available at <http://vdl.sci.utah.edu/publications/2018_imwut_maav/>

\*# Min KT, Lundrigan P, **Sward** K, Collingwood SC, Patwari N. (2018). Smart home air filtering system: A randomized controlled trial for performance evaluation. *Smart Health*, 9-10, 62-75. https://doi.org/10.1016/j.smhl.2018.07.009 <https://www.sciencedirect.com/science/article/pii/S2352648318300448?via%3Dihub>

\*# Lundrigan, P., Min, K., Patwari, N., Kasera, S.K., Kelly, K., Moore, J., Meyer, M., Collingwood, S.C., Nkoy, F., Stone, B., **Sward**, K. (2018). EpiFi: An in-home IoT architecture for epidemiological deployments. Thirteenth *IEEE Workshop on Practical Issues in Building Sensor Network Applications (SenseApp), 619-626.*  Oct 1-4 2018. Available at: <https://span.ece.utah.edu/pub/EpiFi.pdf> and <https://pdfs.semanticscholar.org/3d46/34a5c72737e272663a1514d35c230d2df899.pdf?_ga=2.78735767.286514703.1543872304-1342806791.1541020000>

\*# Kalsy, M., Lin, J., Bray, B. & **Sward**, K. (2018). Role of Nursing Informatics in the Automation of Pneumonia Quality Measure Data Elements. Computers Informatics Nursing, 2018 Jun 21. [Epub ahead of print].
doi: 10.1097/CIN.0000000000000451. PMID: 29927766 [In print as Comput Inform Nurs. 2018 Oct;36(10):475-483.]

\*# Gouripeddi R, Lane E, Madsen R, Butcher R, LaSalle B, **Sward** K, Fritz J, Facelli JC, Cummins M, Shao J, Singleton R. (2017). Towards a scalable informatics platform for enhancing accrual into clinical research studies. *J Clin Transl Sci*. 2017 Sep;1(S1):20–20.

\*# Newth CJL, **Sward** KA, Khemani RG, Page K, Meert KL, Carcillo JA, Shanley TP, Moler FW, Pollack MM, Dalton HJ, Wessel DL, Berger JT, Berg RA, Harrison RE, Holubkov R, Doctor A, Dean JM, Jenkins TL, Nicholson CE; Eunice Kennedy Shriver National Institute for Child Health and Human Development Collaborative Pediatric Critical Care Research Network (CPCCRN). (2017). [Variability in usual care mechanical ventilation for pediatric acute respiratory distress syndrome: Time for a decision support protocol?](https://www.ncbi.nlm.nih.gov/pubmed/28930815) Pediatr Crit Care Med. 2017 Nov;18(11):e521-e529. doi: 10.1097/PCC.0000000000001319. PMID:28930815

\*# **Sward** KA, Newth CJL, Khemani RG, Page K, Meert KL, Carcillo JA, Shanley TP, Moler FW, Pollack MM, Dalton HJ, Wessel DL, Berger JT, Berg RA, Harrison RE, Doctor A, Dean JM, Holobkov R, Jenkins TL, Nicholson CE; Eunice Kennedy Shriver National Institute for Child Health and Human Development Collaborative Pediatric Critical Care Research Network (CPCCRN). (2017) [Potential Acceptability of a Pediatric Ventilator Management Computer Protocol.](https://www.ncbi.nlm.nih.gov/pubmed/28926488) Pediatr Crit Care Med. 2017 Nov;18(11):1027-1034. doi: 10.1097/PCC.0000000000001331. PMID: 28926488

\*Newth C.J.L., Khemani, R.G., Jouvet, P.A., **Sward**, K.A. (2017). Mechanical ventilation & decision support in pediatric intensive care. Pediatric Clinics of North America, 64(5), 1057-1070 doi: 10.1016/j.pcl.2017.06.006 [October]

\* Luo, G. & **Sward**, K. (2017). A roadmap for optimizing asthma care management via computational approaches. JMIR Medical Informatics 5(3):e32 DOI: [10.2196/medinform.8076](https://doi.org/10.2196/medinform.8076)
http://medinform.jmir.org/2017/3/e32/ PMID: 28951380 PMCID: [PMC5635229](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5635229/) [Sept 26]

\*# Hirshberg, E.L., Lanspa, M.J., Wilson, E.L., **Sward**, K.A., Jephson, A., Larsen, G.Y., Morris, A.H. (2017). A pediatric ICU bedside computer protocol for hyperglycemia is feasible, safe, and offers advantages. Diabetes Technology and Therapeutics. 19(3), 188-193 doi:10.1089/dia.2016.0423

\*# Carcillo, J.A., **Sward**, K., Halstead, E.S., Telford, R., Jimenez-Bacardi, A., Shakoory, B., Simon, D., Hall, M., Eunice Kennedy Shriver National Institute of Child Health and Human Development Collaborative Pediatric Critical Care Research Network Investigators. (2016) A Systemic Inflammation Mortality Risk Assessment Contingency Table for Severe Sepsis. *Pediatric Critical Care Medicine*. 2017 Feb;18(2):143-150 [Epub ahead of print 2016 Dec 9]. doi: 10.1097/PCC.0000000000001029. PubMed PMID: 27941423; PubMed Central PMCID: PMC5291785

\*# Lyons, A., **Sward**, K.A., Deshmukh, V., Pett, M.A., Donaldson, G.W., Turnbull, J. (2016). Impact of Computerized Provider Order Entry (CPOE) on Length of Stay and Mortality. Journal of the American Medical Informatics Association. 2016 Jul 8. [Epub ahead of print] PubMed PMID: 27402139. doi: 10.1093/jamia/ocw091. Online at http://jamia.oxfordjournals.org/cgi/content/full/ocw091?ijkey=2UVFHIMxvzWRYAi&keytype=ref

\*# **Sward**, K.A., Rubin, S., Jenkins, T.L., Newth, C.J.L., Dean, J.M., Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD) Collaborative Pediatric Critical Care Research Network (CPCCRN). (2016). Case Study: Semantic Annotation of a PICU registry. Computers Informatics Nursing 2016 Mar;34(3):101-4. doi: 10.1097/CIN.0000000000000236. PubMed PMID: 26958992; PubMed Central PMCID: PMC4788017.

\* **Sward**, K.A. & Newth, C.J.L. (2016). Computerized decision support systems for mechanical ventilation in children. *Journal of Pediatric Intensive Care, 0*, 1-6 (online ahead of print 26 October 2015). https://www.thieme-connect.de/products/ejournals/issue/eFirst/10.1055/s-00029029

\* Cummins, M.R., **Sward K,** Guo JW. (2015). Leaders in Nursing Informatics Education and Research: The University of Utah Celebrates 25 Years. Computers Informatics Nursing, 33(9), 379-381

\*# Iribarren, S.J, **Sward, K.A**., Beck, S.L., Pearce, P.F., Thurston, D., & Chirico, C. (2015). Qualitative evaluation of a text messaging intervention to support patients with active tuberculosis: Implementation considerations. JMIR mHealth and uHealth, 3(1):e21. DOI: [10.2196/mhealth.3971](http://doi.org/10.2196/mhealth.3971) PMCID: [4376194](http://www.ncbi.nlm.nih.gov/pmc/articles/4376194)

\*# Frey, L.J., **Sward, K.A**., Newth, C.J.L., Khemani, R.G., Cryer, M.E., Thelen, J.L., Enriquez, R., Shaoyu, S., Pollack, M.M., Harrison, R.E., Meert, K.L., Berg, R.A., Wessel, D.L., Shanley, T.P., Dalton, H., Carcillo, J., Jenkins, T.L. Dean, J.M., (2015). Virtualization of open-source secure web services to support data exchange in a pediatric critical care research network. *Journal of the American Medical Informatics Association*. 2015 Nov;22(6):1271-6. doi: 10.1093/jamia/ocv009. PMCID: PMC4639713
2015 Mar 21. pii: ocv009. doi: 10.1093/jamia/ocv009. [Epub ahead of print]

\*# Guo J, **Sward KA**, Beck SL, Wong B, Staggers N, Frey L. (2014). Using a content analysis to identify study eligibility criteria concepts in cancer nursing research. CIN: Computers, Informatics, Nursing, 32 (7), 333-342. July 2014

\*# Guo J, **Sward KA**, Beck SL, Staggers N. (2014). Quality of reporting randomized controlled trials in cancer nursing research. Nursing Research Jan-Feb;63(1):26-35.

\*# Hirshberg, E.L., **Sward, K**., Faustino, E.V.S., Nadkarni, V., Agus, M., Morris, A.H., Lacroix, J. for the PALISI Network Investigators. (2013). Clinical equipoise regarding glycemic control: A survey of pediatric intensivist perceptions. *Pediatric Critical Care Medicine, 14*(2):123-9. PMID: 23132394. (EPub. 2012 Nov 5) Pediatr Crit Care Med. 2013 Feb;14(2):123-9.

\*# Newth, C.J., Meert, K.L., Clark, A.E., Moler, F.W., Zuppa, A.F., Berg, R.A., Pollack, M.M., **Sward, K.A**., Berger, J.T., Wessel, D.L., Harrison, R.E., Reardon, J., Carcillo, J.A., Shanley, T.P., Holubkov, R., Dean, J.M., Doctor, A., Nicholson, C.E. & the Eunice Kennedy Shriver National Institute of Child Health and Human Development Collaborative Pediatric Critical Care Research Network. (2012). [Fatal and near-fatal asthma in children: The critical care perspective.](http://www.ncbi.nlm.nih.gov/pubmed/22494876) *Journal of* Pediatrics, 161(2), 214-221. PMID: 22494876. doi: 10.1016/j.jpeds.2012.02.041 PMCID: [PMC3402707](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3402707/)

\* Blagev, D.P., Hirshberg, E.L., **Sward, K.**, Thompson, B.T., Brower, R., Truwit, J., Hite, D., Steingrub, J., Orme, J.F. Jr., Clemmer, T.P., Weaver, L.K., Thomas, F., Grissom, C.K., Sorenson, D., Sittig, D.F., Wallace, C.J., East, T.D., Warner, H.R., Morris, A.H. (2012). The evolution of eProtocols that enable reproducible clinical research and care methods. *Journal of Clinical Monitoring and Computing, 26*(4), 305-317. PMID: 22491960.

\*# Jung, C.Y., **Sward, K.,** & Haug, P. (2011). Executing Medical Logic Modules expressed in ArdenML using Drools. *Journal of the American Medical Informatics Association, 19*(4), 533-536.

\* # Khemani, R.G, **Sward, K**., Morris, A., Dean, J.M., & Newth, C.J.L. (2011). Variability in usual care mechanical ventilation for pediatric acute lung injury: the potential benefit of a lung protective computer protocol. *Intensive Care Medicine, 37*(11),1840-1848

\* Matney, S., Brewster, P.J., **Sward, K.A.**, Cloyes, K.G., & Staggers, N. (2011). Philosophical approaches to the nursing informatics data-information-knowledge-wisdom framework. *Advances in Nursing Science*, *34*(1), 6-18.

\* Morris, A.H., Hirshberg, E., & **Sward, K.A**. (2009). Computer protocols: How to implement. *Best Practice & Research Clinical Anaesthesiology, 23* (1), 51-67.

\* # **Sward, K.A**., Richardson, S., Kendrick, J., & Maloney, C. (2008). Use of a web-based game to teach pediatric content to medical students. *Ambulatory Pediatrics*, 8(6), 354-359.

\* # Morris, A.H., Orme, J., Rocha, B.H., Holmen, J., Clemmer, T., Nelson, N., Allen, J., Jephson, A., Sorenson, D., **Sward, K.,** Warner, H. for the Reengineering Critical Care Clinical Research Investigators. (2008). An electronic protocol for translation of research results to clinical practice. *Journal of Diabetes Science and Technology 2*(5), 802-808

\* # Morris, A.H., Orme, J., Truwit, J.D., Steingrub, J., Grissom, C., Lee, K.H., Li, G.L., Thompson, B.T., Brower, R., Tidswell, M., Bernard, G., Sorenson, D., **Sward, K.,** Zheng, H., Schoenfeld, D., & Warner, H. (2008). A replicable method for blood glucose control in critically ill patients *Critical Care Medicine, 36* (6), 1787-1795*.*

\* # **Sward, K.A**., Orme, J., Sorenson, D., Baumann, L., Morris, A.H. for the Reengineering Critical Care Clinical Research Investigators. (2008). Reasons for declining computerized insulin protocol recommendations. *Journal of Biomedical Informatics, 41*(3), 488-497.

\* Sorenson, D., Grissom, C., Carpenter, L., Morris, A.H., Austin, A. **Sward, K**., Napoli, L., & Warner, H. for the Reengineering Critical Care Clinical Research Investigators. (2008). A frame-based representation for a bedside ventilator weaning protocol. *Journal of Biomedical Informatics, 41*(3), 461-468.

\* # Hirshberg, E., **Sward, K**., Lacroix, J., Willson, D., and Morris, A.H. for the Re-engineering Clinical Research in Critical Care Network, the Pediatric Acute Lung Injury and Sepsis Investigators (PALISI) Network and the NIH/NHLBI Acute Respiratory Distress Syndrome (ARDS) Network. (2008). Blood glucose control in critically ill adults and children: A survey on stated practice. *CHEST 133*(6),1328-1335

\* # Thompson, B.T., Orme, J.F., Zheng, H., Luckett, P.M., Truwit, J.D., Willson, D.F., Hite, R.D., Brower, R.G., Bernard, G.R., Curley, M.A.Q., Steingrub, J.S., Sorenson, D.K. **Sward, K.,** Hirshberg, E. and Morris, A.H. for the Reengineering Critical Care Clinical Research Investigators. (2008). Multicenter validation of a computer-based clinical decision support tool for glucose control in adult and pediatric intensive care units. *Journal of Diabetes Science and Technology, 2*(3), 357-368.

**\* # Sward, K.A.** (2007) Patterns of noncompliance with recommendations from a computerized insulin protocol. Ph.D. dissertation, The University of Utah, United States -- Utah. ProQuest Digital Dissertations database. (Publication No. AAT 3265845).

\* Gassert, C.A. & **Sward, K.A**. (2007). Phase 1 implementation of an academic medical record for integrating information management competencies into a nursing curriculum*.* *Studies in Health Technology and Informatics, 129*(pt 2), 1392-1395.

\* Phansalkar, S., **Sward, K.A**., Weir, C.R. & Morris, A.H. (2007). Mapping clinicians’ perceptions about computerized protocol use to an IT implementation framework. *Studies in Health Technology and Informatics, 129*(pt 2), 1098-1101.

\* Thompson, C. B., & **Sward, K**. (2005). Modeling and teaching techniques for conceptual and logical relational database design. *Journal of Medical Systems, 29*, 513-525.

\* # Roemer, L.K., Richardson, S.J., **Sward, K**., & Tilley, C. (2005). Redundancy in a computer-generated order list: Meeting the needs of nurses at various levels of practice expertise. *Computers, Informatics, Nursing, 23,* 73-82.

\* # Roberts, L., & **Sward**, K. (2001). Birth center outcomes reported through automated technology. *Journal of Obstetric, Gynecologic and Neonatal Nursing*, *30*(1), 110-120.

\* # Staggers, N., Lyons, A., & **Sward, K**. (2000). Implementation of a new e-mail application in a health sciences center. Case study. *Computers in Nursing, 18*(2), 59-61.

Published Abstracts

\*# Gouripeddi R, Wang Y, Li B, Davis K, Cambron C, **Sward** K, Horel J, Facelli J. (2020). Modeling Environment Factors in Local COVID-19 Emergent Phenomenon. World Meteorological organization, Advancing earth and space science. Climatological, Meteorological and Environmental factors in the COVID-19 pandemic conference; August 2020, virtual symposium. https://agu.confex.com/agu/COVIDsymp2020/meetingapp.cgi/Paper/662385

\* # Yang R, Wang H, Tracy EL, Edelman LS, **Sward** K, Demeris G, Donaldson G. (2019). How are social isolation and loneliness related to cognitive functioning among Chinese older adults? Innovation in Aging, 8(Suppl 1), S850. 2019/11

\*# Guo, J., **Sward**, K. Beck, S., Donaldson, G., Chapman, W., Frey, L. (2019). Using the Dynamic Symptoms Model to Explore a Comprehensive List of Cancer Pain Research-Related Variables. *ONS 44th Annual Congress*; ONS
presented by Dr. Guo, 4/12/2021
Available at https://ons.confex.com/ons/2019/meetingapp.cgi/Paper/4850

\*# Morgan T, Gouripeddi R, **Sward** K. (2019). Characterizing Metadata of e-Devices for Interventional Translational Research. AMIA informatics summit March 26-28 [abstract and poster].

\* Gouripeddi R, Tran L, Lund A, Madsen R, Facelli J, **Sward** K. (2019). The Utah PRISMS Informatics Ecosystem: An Infrastructure for Generating and Utilizing Exposomes for Translational Research. Systems demonstration, March 26-28 AMIA informatics summit, San Francisco.

\*# **Sward** K, Moore J, Weise J, Meyer M. (2018). Participatory design for exposomic studies involving sensors. American Medical Informatics Association (AMIA) Annual Meeting November 2018, San Francisco, CA. <https://symposium2018.zerista.com/event/member/509531> (Abstract + poster)

\*# Yang R, Plasek J, Wilson A, Cummins M, **Sward** K. (2018). Comparing Machine Learning Algorithms to Predict Falls of Community Dwelling Older Adults. American Medical Informatics Association (AMIA) Annual Meeting November 2018, San Francisco, CA. <https://symposium2018.zerista.com/event/member/508923> (Abstract + poster)

\*International Society of Exposure Science/International Society for Environmental Epidemiology [ISES/ISEE] joint meeting August 26-30 2018 (Ottawa, Canada). *Page numbers refer to abstract book, available at* [*https://isesisee2018.org/wp-content/uploads/2018/09/Abstract-Book-V4-COMPLEET-04-09.pdf*](https://isesisee2018.org/wp-content/uploads/2018/09/Abstract-Book-V4-COMPLEET-04-09.pdf)*.* Also published in a special issue of Environmental Health Perspectives, 2018 Sep 24; 2018(1). <https://ehp.niehs.nih.gov>

* Burnett N, Gouripeddi R, Facelli J, Mo P, Madsen R, Butcher R, **Sward** K; Development of Sensor Metadata Library for Exposomic Studies.(poster). P01.0320, p. 966.
* Tiase V, Gouripeddi R, **Sward** K, Burnett N, Butcher R, Mo P, Cummins M. Advancing Study Metadata Models to Support an Exposomic Informatics Infrastructure. (poster). P01.0330. p. 967
* Collingwood S, Gouripeddi R, Wong B, **Sward** K. Environmental Influences on Health Outcomes-Integrating Real-Time Exposure Measures from Homes into Longitudinal Cohort Studies: Lessons from the Field. (poster, presented by **Sward**). P02.0860. p. 1320
* Gouripeddi R, Madsen R, Tran L, Mo P, Burnett N, Butcher R, Cummins M, **Sward** K, Facelli J. Generating Consistent Spatio-temporal events of exposure for translational exposomic research. (presentation). P03.0470. p.1647.

\* International Society of Exposure Science 2017 Oct (Research Park Triangle, NC). Abstracts available at

https://www.intlexposurescience.org/Public/Public/Annual\_Meeting/PastMeetings/2017\_Meeting.aspx

* N. Burnett, R. Gouripeddi, J. Wen, P. Mo, R. Madsen, R. Butcher, K. A. **Sward**, J. Facelli; Harmonization of Sensor Metadata and Measurements to Support Exposomic Research (Poster). SU-PO-53, p.33
* N. Burnett, R. Gouripeddi, J. Wen, P. Mo, R. Madsen, R. Butcher, K. A. **Sward**, J. Facelli; Harmonization of Sensor Metadata and Measurements to Support Exposomic Research (Presentation) TH-PL-G2-668, p.364
* Panel TU-SY-F4: An Infrastructure for Generating Exposomes: Initial Lessons from the Utah PRISMS Platform, p 194-196
	+ TU-SY-F4-353: Introduction to Utah PRISMS Platform. K. A. **Sward**.
	+ TU-SY-F4-354: Utah PRISMS Data Acquisition System for Generating Exposomes. N. Patwari, P. Lundrigan, K. Min, K. Kelly, M. Meyer, K. A. **Sward**;
	+ TU-SY-F4-355: Utah PRISMS Data Integration Platform for Generating Exposomes. R. Gouripeddi, M. Cummins, N. Burnett, R. Madsen, P. Mo, P. Warner, R. Butcher, K. A. **Sward**, J. Facelli
	+ TU-SY-F4-357: Presentation and Visualization of Exposomic Data for Research Use-cases. K. A. **Sward**

\* Gouripeddi, R., Burnett, N., Cummins, M., Facelli, J., **Sward**, K. (2017). A conceptual representation of exposome in translational research. Oral podium presentation, AMIA symposium Proceedings S91 S91: Oral Presentations - Precision Medicine on November 7, 2017 from 3:30 PM to 5:00 PM.

\* Gouripeddi, R., Cummins, M.,Lane, E., Madsen, R., Butcher, R., Shao, J., **Sward**, K., LaSalle, B., Singleton, R., Fritz, J., Facelli, J. (2017). Towards a scalable informatics platform for enhancing accrual into clinical research studies. Translational Science 2017, Washington, DC April 19-21 2017. Zenodo. <http://doi.org/10.5281/zenodo.555965> <https://zenodo.org/record/555965#.WU1gPrjN6YF>

\*# Guo, J., Mowery, D.L., Lai, D., & **Sward**, K. (2017). A Corpus Analysis of Social Connections and Social Isolation in Adolescents Suffering from Depressive Disorders. Proceedings of the Fourth Workshop on Computational Linguistics and Clinical Psychology, Vancouver Canada, 26-31. http://www.aclweb.org/anthology/W/W17/W17-3103.pdf

\* **Sward**, K., Bui, A., Ambite, J., Dellarco, M., Facelli, J., Gilliland, F. (2016). Pediatric Research using Integrated Sensor Technology (PRISMS): Applying Sensor Technology and Informatics to Better Understand Asthma. AMIA symposium Proceedings 2016 <https://knowledge.amia.org/amia-63300-1.3360278/t005-1.3362920/f005-1.3362921/2497116-1.3363147/2497116p-1.3363148?qr=1>. [abstract & poster; **Distinguished poster award**]. https://pdfs.semanticscholar.org/af58/a6ef10046914a7b5dc9066115413c2cb9f03.pdf

\*# Gawron Lori, Sanders J, **Sward** K, Turok D. Uptake of long-acting reversible contraception among women with chronic medical diseases in a tertiary referral center. Contraception. 2016; 94(4):404-405. [abstract & poster]

**\*# Sward, K.A**., Newth, C.J., Khemani, R.G. Dean, J.M. (2015). Data-driven knowledge base evaluation: Translating an adult CDS tool for use in pediatric care. AMIA Annual Symposium Proceedings. 2015/11/17. Available at https://knowledge.amia.org/59310-amia-1.2741865/t005-1.2744350?qr=1

\*# **Sward, K.A**., Newth, C., Page, K., Dean, JM. (2015). Pediatric intensivist attitudes about a ventilator management computer protocol. American Thoracic Society Proceedings. 2015/5/19

\*# Hirshberg, E.L., Lanspa, M., **Sward, K**., Jephson, A., Brown, S. & Morris, A. (2014). A computer insulin titration protocol is associated with a reduction of hypoglycemia in the PICU. Society of Critical Care Medicine.

\*# Kalsy, M, Bray, B., Garvin, J. & **Sward, K**. (2012). Quality improvement informatics – a comparative view of quality measures. AMIA Annual Symposium Proceedings.

\* # Al-Sheikh, Y.T., Haug, P.J., Wong, A., Warner, H.R., Morris, A.H., **Sward, K.A.** (2008). Using a diabetes data mart in individualizing diabetes management. AMIA Annual Symposium Proceedings. 2008 Nov 6:1180 [abstract]

\* # Wong, A., Al-Sheikh, Y.T., Warner, H.R., Haug, P.J., **Sward, K.A.,** Morris, A.H. (2008). Evaluation and comparison of IV insulin-treatment protocols using data from critically ill patients in the ICU. AMIA Annual Symposium Proceedings. 2008 Nov 6:1178. [abstract & poster]

\* # **Sward, K.A**., Sorenson, D., Thompson, B.T., & Morris, A.H. for the Reengineering Critical Care Clinical Research Investigators (2008). ICU Nurses Reasons to Decline Computerized Insulin Protocol Recommendations. 2008 ATS International Conference, Toronto Canada (May 2008) [abstract & poster]. AJRCCM 2008: A129

\* Morris, A.H., Brower, R., **Sward, K.,** Orme, J., Thompson, B.T., Oldmixon, C., Schoenfeld, D., for Reengineering Clinical Research in Critical Care Network (2008). Multicenter protocol committee oversight of validation and refinement of an electronic decision support tool. 2008 ATS International Conference, Toronto Canada (May 2008) [abstract & poster]. AJRCCM 2008: A640.

\* **Sward, K.**, Morris, A., Sorenson, D., Weaver, L., Grissom, C., and Warner, H., for Reengineering Clinical Research in Critical Care Network (2007). A Software Tool To Develop Computerized Bedside Clinical Protocols. 2007 ATS International Conference, San Francisco (May 18-23 2007). [abstract & poster]. AJRCCM. 2007 175: A793

\* # Hirshberg E, Lacroix J, **Sward K**, Morris A, Jouvet P, Thomas N,Thompson T, Willson D, Zaritsky A, Cox P, Hébert P, au nom des chercheurs de l'ARDS Network, du NIH Roadmap contrat «Reengineering Clinical Research in Critical Care (RCRCC)» et du Pediatric Acute Lung Injury and Sepsis Investigators (PALISI) Network. Une enquête nord-américaine sur le contrôle de la glycémie. 35e Congrès annuel de la Société de Réanimation de Langue Française, Paris, janvier 2007. *Réanimation 2007 16*. [abstract & poster]

\* # Hirshberg E, **Sward K**, Lacroix J, Oldmixon C, Sorenson D, Bernard G, Herbert P, Thompson T, Cox P, Jouvet P, Thomas N, Willson D, Zaritsky A, Morris A. (2006). Glucose Control in Critically ill Adults and Children: A Survey on Stated Practice *Critical Care Medicine*, *34*, A79. [abstract & poster]

**Sward K**, Morris A, Sorenson D, Warner H. (5/2006). A Software Tool to Develop Computerized Bedside Clinical Protocols. *Inventory and Evaluation of Clinical Research Networks (IECRN) National Leadership Forum*, Rockville, MD. [abstract and demo]

\* # Orme J, Sorenson D, **Sward K**, Warner H, Thompson T, Brower R, Truwit J, Willson D, Morris A. (5/2006). An Effective and Safe Computerized Glucose/IV Insulin Infusion Protocol. *American Thoracic Society 2006 International conference*, A300. [abstract & poster]

\* Orme J, Morris A, Brower R, Thompson T, Truwit J, Willson D, Anderson S, Sorwonson D, **Sward K**, Warner H. (5/2006). Development and Refinement of a Computerized Glucose/IV Insulin Infusion Protocol. *American Thoracic Society 2006 International Conference*, A216. [abstract & poster podium presentation by Dr. Orme]

Morris A, Orme J, Lee K, Truwit, J, Jefferson L, Willson D, Zaritsky A, Bogue C, Brower R, Sorenson D, **Sward K**, Warner H, Li G, Leong T. (5/2006). Unusual Insight from Clinician Compliance with a Bedside Computerized Glucose/IV Insulin Infusion Protocol. *American Thoracic Society 2006 International Conference*, A380. [abstract & poster] AJRCCM. 2006: 174: A380

Other

Thompson, C. B., **Sward, K**., & Lyons, A. (2000). Using a relational database to support nursing research [letter to the editor]. *Computers in Nursing, 18*(4), 155-156.

2020 Military Health System Research Symposium. Accepted poster abstracts, Conference cancelled due to COVID-19

Gouripeddi, R., Cummins, M., Collingwood, S., **Sward**, K., Facelli, J. Utilization of a Data and Analytics Infrastructure for Total Exposure Health Research.

Eckel et al. Statistical and machine learning methods for using sensor monitoring systems to predict asthma exacerbations.

**G. PRESENTATIONS**

1. Peer-Reviewed Presentations

|  |  |  |
| --- | --- | --- |
| Dates | Title, Sponsor | Location |
| 7/2022 | Guo J, Tay D, Weinstein SM, Lyons A, **Sward** K. Cancer pain trajectories in the last two years of life. Presented by Dr. Guo at Asia-Pacific Association of Medical Informatics APAMI July 2022(accepted for follow up, peer reviewed paper) | Taipei, Taiwan |
| 4/21 | “Patient-Generated Health Data in Pediatric Asthma: A Participatory Design Approach”, Podium presentation (paper) accepted for Western Institute of Nursing’s 54th Annual Communicating Nursing Research Conference. (Tiase, Cummins, **Sward**) | virtual |
| 11/19 | “Citizen Science: Using Informatics to Engage Vulnerable Populations in Scientific Research”, AMIA fall symposium panel S97. (Demiris, Taylor, Irribarren, **Sward**) | Washington DC |
| 11/19 | “Toward patient facing clinical decision support: Critical issues and near-term opportunities”. AMIA fall symposium panel S106. Boxwala, Desroche, Middleton, Richardson, **Sward**.  | Washington DC |
| 9/18 | Demeris, G. Iribarren, S., **Sward** K. (2018). Oral presentation at CANS Council for the Advancement of Nursing Science 2018 State of the Science Congress on Nursing Research: Precision Health, September 13-15, 2018  | Washington DC |
| 9/18 | Guo, J**.**, Beck, S. L., & **Sward**, K. (2018). *Discovering Public Opinions from Twitter Data About Using Medical Marijuana for Cancer Pain.* Oral presentation at International Conference on Cancer Nursing (ICCN) Annual Meeting. Presented by Dr. Guo. | Auckland, New Zealand |
| 5/09 | “Decoding the Mysteries of Biomedical Informatics: A Practical Tutorial for Oncology Nurses” Reeves, D., Ketcham, M., & **Sward**, K. ONS annual meeting. [panel presentation] | San Antonio, TX |
| 4/09 | “Informatics competencies: Not just for NI specialists!” (Staggers, N., Gooder, V., Poynton, M., & **Sward**, K). WIN annual conference [panel presentation] | Salt Lake City, UT |
| 4/08 | “Reasons for Declining Intravenous Insulin Protocol Recommendations.” **Sward**, K., Morris, A., Orme, J., Sorenson, D. & Warner, H. 4th Annual Utah Health Services Research Conference: Using HIT for Quality Improvement. [panel presentation] | Salt Lake City, UT |
| 1/06 | “Tools for clinical decision support”, National Collaborative Pediatric Critical Care Research Network (CPCCRN) steering committee meeting | Bethesda, MD |
| 7/04 | “A Prospective, Randomized Trial Evaluating the Efficacy and Attitudes of Students Learning Pediatrics Using Web-based Tools” (with C. Maloney (presenter), J. Kendrick, M. Wright, & S. Richardson) Slice of Life 2004 | Amsterdam, The Netherlands |

1. Invited Speeches / Lectures / Demonstrations

|  |  |  |
| --- | --- | --- |
| Dates | Title, Sponsor | Location |
| 4/2019 | Making the connection: Integrated sensor systems research. **State of the Science invited lecture**, Western Institute of Nursing 2019 Annual conference, April 10-13, | San Diego, California |
| 1/2019 | “Sensors, Informatics, and Technology in Clinical and Translational Science”. **Distinguished Visiting Professor Lecture**. University of Colorado School of Nursing. Jan 31 2019 (on site 1/30-2/1) | Denver, CO |
| 8/2018 | PRISMS Informatics Center. ISES/ISEE 2018 Tech fair | Ottawa Canada |
| 10/19/2017 | “PRISMS informatics center”. ISES 2017 Tech Fair  | Research Park Triangle, NC |
| 9/21/2016 | “Team Science for Precision Medicine: The Utah PRISMS Informatics Center.” 2016 Air Quality, Health, and Society Symposium | Salt Lake City, UT |
| 5/2016 | “Harnessing Big Data to Understand Pediatric Asthma: the Utah PRISMS project”. Utah chapter Health Information Management & Systems Society (UHIMSS) annual meeting | Salt Lake City, UT |
| 5/2016 | “PRISMS Informatics Center: Federated Integration Architecture.” University Healthcare Leadership Ted-style talk | Salt Lake City, UT |
| 11/2014 | “Clinical research informatics in pediatric critical care”. Biomedical Informatics Seminar Series. With J.M. Dean | Salt Lake City, UT |
| 8/12/13 | “Nursing knowledge: Big data research for transforming healthcare”. Invitational conference to develop an action plan for shaping health policy and informatics initiatives that uses a national nursing knowledge model.  | University of Minnesota School of Nursing |
| 9/27/2013 | "Social media for Oncology Nurses". Intermountain chapter of the Oncology Nurses Society | Salt Lake City, UT |
| 9/2013 | "Inter-professional research in the CPCCRN". College of Nursing Seminar Series | Salt Lake City, UT |
| 8/31/2012 | “How to write your IRB application”. College of Nursing Seminar Series | Salt Lake City, UT |
| 5/18/2012 | “Informatics: Translation to Practice”. Plenary panel; Conference on Personalized Health Care for Women and Children.  | Salt Lake City, UT |
| 4/12 | “Clinical Research Informatics in the ICU”. Biomedical Informatics Seminar | Salt Lake City, UT |
| 10/06  | “Databases”, Clinical Informatics Introductory Workshop, UNIN and Intermountain Health Care | Salt Lake City, UT |
| 5/06 | “Technology in the Classroom”, 51st Annual American College of Nurse-Midwives conference | Salt Lake City, UT |
| 2004 | “Designing your Research Database”, Data Madness Seminar, Veterans Administration Hospital | Salt Lake City, UT |
| 2003 | “Databases”, Nursing Informatics Overview, SMS MedSeries4 Patient Care Focus Group | Salt Lake City, UT |
| 11/00 | “Databases,” Nursing Informatics Overview, American Nursing Informatics Association and Utah Nursing Informatics Network | Palm Springs, CA |
| 11/00 | “Taxonomies,” Nursing Informatics Overview, American Nursing Informatics Association and Utah Nursing Informatics Network | Palm Springs, CA |
| 4/00 | “Databases,” Nursing Informatics Certification Review, University of Utah College of Nursing and the SMS MedSeries4 Patient/Care Focus Group | Salt Lake City, UT |
| 6/98 | “Iliad Development,” (Invited Speaker), A.D.A.M. Software | Atlanta, GA |

**Posters**

|  |  |  |
| --- | --- | --- |
| Dates | Title, Sponsor | Location |
| 2022 | **Sward** K, Guo J, Hull W. (2022). Pain and Opioid Evidence Base: NIH HEAL CDEs. Poster at AMIA fall symposium, November 2022,  | Washington DC |
| 2022 | Title: Exposure Health Informatics Ecosystem: An Infrastructure for Generating and Utilizing Exposomes for Translational ResearchCo-Authors: Ram Gouripeddi, Mollie Cummins, Julio Facelli, Katherine SwardNational Academies of Sciences, Engineering, and Medicine. Workshop Artificial Intelligence and Open Data Practices in Chemical Hazard Assessment. https://www.nationalacademies.org/event/05-25-2022/workshops-to-support-epas-development-of-human-health-assessments-artificial-intelligence-and-open-data-practices-in-chemical-hazard-assessment. | Washington DC |
| 2022 | National Academies Workshop to Support EPA's Development of Human Health Assessments: Artificial Intelligence and Open Data Practices in Chemical Hazard Assessment. Virtual poster: EHIE. Gouripeddi, Facelli,k Cummins, Sward | virtual |
| 2022 | Overby, R., Eddington, D., **Sward**, K,, Bohnsack, J., Inman, CJ, Stern, S., James, K., Treemarcki E, Hersh, A. Patient and Parent Perceptions of an Established Rheumatology Transition Clinic for Adolescents and Young Adults. ACR Convergence (rheumatology) Conference. Abstract ID 1277167 submitted for oral or poster or lightning presentation.Nov 10-14 | Philadelphia |
| March 2022 | Guo, J., **Sward**, K.A. Towards Patient Centered Bone Cancer Pain Management Using Machine Learning Techniques. ONS conference. Submitted October 2021 accepted Nov 2021 for ePOSTER at the 47th Annual ONS Congress, March 2022, Anaheim CA. Poster ID # 11611. *Findings from K award*. | Anaheim CA |
| 11/1/2021 | Guo, J., **Sward**, K. Impact of Comorbidity Profiles on Pain Trajectories in Breast Cancer Patients by Using Electronic Health Record Data. Poster session 1, AMIA annual meeting.  | San Diego, CA |
| 8/30/2021 – 9/2/2021 | Facilitating Population-Level Studies by Using Housing Characteristics to Predict Household Levels of PM2.5.D. Groat, R.Gouripeddi, K.**Sward**ISES 2021 Virtual Experience | Virtual |
| 4/14-16/2021 | Impact of the pandemic on Baccalaureate Nursing Students’ Emotional DistressMeek, P., Linder, L., **Sward**, K.A., Sanchez Birkhead, A.C., Kepka, D., Stephens, C., Li, H. Western Institute of Nursing 2021 Annual Conference, virtual. <https://www.winursing.org/wp-content/uploads/2021/04/2021-Conference-Proceedings.pdf>  | Virtual |
| 11 2020  | A Corpus Analysis of Social Isolation from Clinical Notes of Patients with Cancer ID: 3410589  Jia-Wen Guo, Christina L. Radloff, Katherine A. **Sward**, Susan L. Beck, Wendy W. Chapman, Gary W. Donaldson, Lewis J. Frey. AMIA Annual Symposium. | Virtual |
| 11/18/2019 | Assimilating Pollen into Exposomes for Pediatric Asthma ResearchR. Gouripeddi, L. Tran, T. Gangadhar, R. Madsen, J. Facelli, K. **Sward**, University of Utah. AMIA Annual Symposium | Washington, DC |
| 11/18/2019 | Researchers’ Perspectives on Symptoms related to Cancer Pain: A Network Analysis of Literatures. J. Guo, C. Radloff, S. Beck, G. Donaldson, W. Chapman, K. **Sward**; L. Frey. AMIA Annual Symposium | Washington, DC |
| 11/18/2019 | Evaluating EHR Data Availability for Cancer Pain ResearchC. Radloff, J. Guo, K. **Sward**. AMIA Annual Symposium | Washington, DC |
| 6/15/2018 | “Towards Reproducible Translational Research using Templates” (Ramkiran Gouripeddi, Mollie Cummins, Bernie LaSalle, Katherine **Sward**, Will Dere, Julio Facelli (University of Utah))Research Reproducibility Conference, U of Utah. Poster & abstract.http://campusguides.lib.utah.edu/UtahRR18/abstracts | SLC, UT |
| 6/15/2018 | “Enabling Reproducible Computational Modeling: the Utah PRISMS Ecosystem” (Albert Lund, Ram Gouripeddi, Nicole Burnett, Le-Thuy Tran, Peter Mo, Randy Madsen, Mollie Cummins, Kathy **Sward**, Julio Facelli (University of Utah))Research Reproducibility Conference, U of Utah. Poster & abstract.http://campusguides.lib.utah.edu/UtahRR18/abstracts | SLC, UT |
| 6/1/2018 | “An Environmental Scan of global Air Quality Research for Developing global Exposomic Informatics Infrastructure”. (Gouripeddi, Chang, Cummins, Facelli, **Sward**). NIEHS Global Environmental Health Conference.  | Research Triangle Park, North Carolina |
| 2018 accepted | “Participatory Design for Exposomic Studies Involving Sensors” (**Sward**, Moore, Wiese, Meyer). AMIA annual meeting (Fall 2018). Abstract & Poster | San Francisco, California |
| 2018 accepted | “Comparing Machine Learning Algorithms to Predict Falls of community dwelling older adults” (Yang, Plasek, Wilson, Cummins, **Sward**). AMIA annual meeting (Fall 2018). Abstract & Poster | San Francisco, California |
| 2018 submitted | “Discovering opinions about using medical maijuana for cancer pain from twitter data.” (Guo, Beck, **Sward**). International Conference on Cancer Nursing (ICCN) Sept 2018 | Auckland, New Zealand |
| 3/2018 | “Towards a Molecular Basis for Exposomic Research” AMIA CRI (Spring) meeting. (Burnett, Gouripeddi, Cummins, Facelli, **Sward**). Abstract and Poster. | San Francisco, California |
| 1/2018 | “Utah PRISMS Ecosystem: An infrastructure for personal exposomic research”. (An, Lund, Burnett, Tran, Mo, Madsen, **Sward**, Gouripeddi, Facelli). Young generation technical and leadership (Ygnite) 2018 conference https://ygtlc.org/2018/ | Washington, DC |
| 4/2017 | “Sentiment Analysis in Twitter for Non-Pharmacological Pain Management: a pilot study”. Western Institute of Nursing Communicating Nursing Research Conference. (Guo, **Sward**) | Denver, CO |
| 1/2017 | “Making the Case for Informatics in Global Health”. Extreme Affordability/Global Health Conference 2017 (Gouripeddi, **Sward**) | Salt Lake City, UT |
| 12/2016 | “Leveraging the Electronic Medical Record to Assess Pregnancy Risk in a Regional Tertiary Care Center”. University of Hawaii Family Planning Conference. (Gawron, Sanders, Bullock, Turok, **Sward**) | Manoa, Hawaii |
| 11/2016 | “A Conceptual Architecture for Reproducible On-demand Data Integration for Complex Diseases” Research Reproducibility 2016 conference (Gouripeddi, Eilbeck, Cummins, **Sward**, LaSalle, Peterson, Madsen, Warner, Dere, Facelli) | Salt Lake City, UT |
| 11/2016 | “An infrastructure for Reproducible Exposomic Research”. Research Reproducibility 2016 Conference. (Gouripeddi, Warner, Madsen, Mo, burnett, Wen, Lund, Butcher, Cummins, Facelli, **Sward**) http://campusguides.lib.utah.edu/UtahRR16/abstracts | Salt Lake City, UT |
| 10/2016 | “Pediatric Research unsing Integrated Sensor Monitoring Systems (PRISMS) – Utah Informatics Center Federated Integration Architecture.” Interdiscipinary Approaches for Health and the Environment (ISES) International meeting (**Sward**, Facelli) | Utrecht, The Netherlands |
| 3/2016 | “Sentiment Analysis in Twitter for Non-Pharmacological Pain Management: a pilot study”. 11th annual Health Services Research Conference. Partnering for better health: Bringing Utah’s patient voices to research. (Guo, **Sward**) | Salt Lake City, UT |
| 10/2015 | “Pediatric intensivist attitudes about a ventilator management computer protocol“. Unlocking Best Practice: Collaborative Nursing Research conference. Hosted by Intermountain Healthcare and University of Utah. (**Sward**) | Salt Lake City, UT |
| 10/2014 | “Utah Pioneers: Nursing Informatics”. Utah Nurses Association Centennial Celebration. (Langford, **Sward**). | Salt Lake City, UT |
| 6/2014 | “Integrating new quality provisions into nursing homes”. Academy Health. (Towsley, **Sward**, Kehinde, Madden, & Guo) | San Diego, CA |
| 6/2014 | “Analyzing temporal expression from cancer nursing research eligibility criteria” NI 2014. (Guo, J & **Sward**, K) | Taipei, Taiwan |
| 10/2013 | “Quality improvement in rural nursing homes”. 2013 Intermountain Nursing Research Conference (Towsley, G. L., **Sward**, K. S., Kehinde, J., Madden, C., & Guo, J.) | SLC, UT |
| 11/2012 | “Quality of journal abstracts of randomized controlled trials in oncology nursing research.” First Connections: Advancing Care Through Science Conference (Guo, J., Kuo, C., & **Sward, K**.). | Phoenix, AZ |
| 5/12 | “Quality of journal abstracts of randomized controlled trials in oncology nursing research. “ONS conference. (Guo, J., Kuo, C., & **Sward, K**.). | New Orleans LA |
| 4/09 | “Using electronic health records to enhance simulation in NP education.” (Authors: Perri, S., Robbins, K., Edwards, M., Schwarting, T., Simon, K., Winters, B., Hanberg, A., **Sward, K.**). WIN Annual meeting, April 22-25, | Salt Lake City, UT |
| 4/09 | “Using simulation to teach diagnostic reasoning in the care of older adults” (Authors: Hanberg, A.D., Madden, C., **Sward**, K.A., Winters, B.A.). Connecting the Dots: Geriatric Nursing, Education, and Clinical Simulation Conference. April 2-3, 2009 | Durham, NC |
| 5/08 | “Validated adequately explicit computer protocols to be used for replicable QI studies.” (Authors: Savitz, L., Morris, A.H., **Sward, K.,** Orme, J., Clemmer, T.) NCRR conference - Clinical Research Networks: Building the Foundation for Health Care Transformation May 8, 2008 | Bethesda, MD |
| 5/08 | “Frame-based tools for point-of-care computerized protocols.” (Authors: Sorenson, D., Morris, A.H., Warner, H., **Sward, K**., Orme, J., Clemmer, T.) NCRR conference - Clinical Research Networks: Building the Foundation for Health Care Transformation May 8, 2008 | Bethesda, MD |
| 5/08 | “Reasons for declining instructions from a computer-based insulin protocol.” (Authors: **Sward, K**., Orme, J., Sorenson, D., Warner, H., Morris, A.H.) NCRR conference - Clinical Research Networks: Building the Foundation for Health Care Transformation May 8, 2008 | Bethesda, MD |
| 5/08 | “Blood glucose control with three different QI strategies.” (Authors: Truit, J., Steingrub, J., Orme, J., Lee, K.H., Tidswell, M., Leong, T.Y., Hirshberg, E., Sorenson, D., Warner, H., **Sward, K**., Morris, A.H.) NCRR conference - Clinical Research Networks: Building the Foundation for Health Care Transformation May 8, 2008 | Bethesda, MD |
| 4/08 | “Reengineering Clinical Research in Critical Care.” (Authors: Morris, A., Orme, J., Grissom, C., Thompson, B.T., Truwit, J., Bernard, G., Jefferson, L., Willson, D., Zaritsky, A., Bogue, C., Brower R., Sorenson, D., **Sward, K**., & Warner, H.) 4th Annual Utah Health Services Research Conference: Using HIT for Quality Improvement. April 25, 2008 | Salt Lake City, UT |
| 4/08 | “eProtocol-insulin Development and Refinement in Two Research Networks.” (Authors: Thompson, T., Orme, J., Hirshberg, E., Brower,R., Truwit, J., Willson, D, Jefferson, Bernard, G., Hite, D. Zaritsky, A., Bogue, C., Faustino, V., Luckett, P., Larsen, G., Nadkarni, V., Lee, K., **Sward, K**, Sorenson, D., Morris, A.) 4th Annual Utah Health Services Research Conference: Using HIT for Quality Improvement. April 25, 2008. | Salt Lake City, UT |
| 2/05 | “Re-engineering Clinical Research in Critical Care”, Health Services Research Conference Feb 18 2005 | Salt Lake City, UT |
| 10/98 | “Automated Birth Log” (with L. Roberts), It's a Jungle Out There: Gaining Competitive Advantages by Optimizing Outcomes Conference | Houston, TX |

4. Media

|  |  |  |
| --- | --- | --- |
| Dates | Title/Topic | Type of Media |
| 1/25/2016 | Climbing to the Top 5. <http://nursing.utah.edu/blog/index.php> | Blog |
| 11/2/2015 | Utah Department of Air Quality. Air quality asthma research. **Sward**, Kelly | Blog |
| 9/30/2015 | U researchers to study triggers for pediatric asthma, pollution link. Deseret News 09/29/2016 | Newspaper |
| 9/28/2015 | New U of U study could change the lives of kids with asthma | TV news |
|  |  |  |

5. Didactic Lectures (other than assigned course)

|  |  |
| --- | --- |
| 2022 F | Lecture for PhD Applied Informatics course: Environmental Informatics and Nursing Research |
| 2021 S | VPCAT lecture: Conceptual Frameworks (1/13/2021) |
| 2019 F | Panel – leadership in nursing  |
| 2019 F | Using sensors in research: PRISMS and CEEHI T32 seminar |
| 2016 F | Harnessing Big Data to Understand Pediatric Asthma. Data Science course (lecture) |
| 2016 F | RedCap Overview – DNP students. Lecture |
| 2016 F | Leadership course – Team Science (lecture) |
| 2016 U | IRB overview for DNP - Lecture |
| 2015 F | College of Nursing Seminar Series - Team Science: PRISMS Center |
| 2015 F | Leadership course – leading interprofessional research |
| 2015 U | IRB overview for DNP - Lecture |
| 2014  | Westminster College Healthcare Management Course “Biomedical Informatics” (Feb 2014) Lecture |
| 2014 Spring | PhD: “IRB overview for PhD students” (Feb 2014) Lecture |
| 2014  | NURS 7104: “Secondary Data Analysis” (March 2014) Lecture |
| 2013 Fall | MS-DNP: “IRB – overview for DNP” Lecture |
| 2013 Spring | MS-DNP: “IRB – overview for DNP” Lecture |
| 2012 Fall | BS-DNP: “IRB at U of Utah” Lecture |
| 2012 Spring | MS-DNP: “Utah’s IRB” Lecture |
| 2011 | BSN course – “Nursing Informatics” Lecture |
| 2011 | CNL – “Databases” Lecture |
| 2011 | NURS6802, Clinical Decision Support, “Knowledge Engineering” Lecture/Demo |
| 2010 | N6802, Clinical Decision Support, “Drools” Lecture/Demo |
| 2009 | N6802, Clinical Decision Support, “Knowledge Engineering” Lecture/Demo |
| 2009 | AMIA 10x10 program, Public Health Informatics course, “Databases in Public Health” Online module |
| 2009 | N7010, Domains of Knowledge. “Informatics and Gerontology” |
| 2008 | N6802, Clinical Decision Support, “Knowledge Engineering” |
| 2007 | N6802, Clinical Decision Support, “Decision Support for Nursing” |
| 2004  | N6003, Program Planning and Development, "Using MS Project." Lecture / Demo |
| 2003  | N3000, Individual Assessment in Nursing (3), "Electronic Medical Records." Lecture / Demo |
| 2003 | N3000, Individual Assessment in Nursing (3), "LRL Database." Lecture / Demo |
| 2003 | N6003, Program Planning and Development, "Using MS Project." Lecture / Demo |
| 2002 | N6003, Program Planning and Development, "Using MS Project." Lecture / Demo |

**PROFESSIONAL ORGANIZATIONS & SERVICE**

1. College of Nursing Committees

|  |  |  |
| --- | --- | --- |
| Years | Committee | Role |
| 2021-2023 | Search committee | Chair, NI search 2021; Chair Tenure-line search, 2022 |
| 2015-17; 2019-21 | RPT oversight (RAO)2020 Chair, TL-FARAC | Member |
| 2014-present | RPT committee | Member |
| 2013-15 | Research committee | Member. |
| 2013 2012-2014 | LEAN project – CON workloadAcademic Leadership Team (ALT) | MemberMember |
| 2012-2014 | Information technology team (ad hoc) | Chair |
| 2011/2012 | CoN Search Committee | Member |
| 2007-present | PhD curriculum committee | Member; curriculum revision subcommittee 2010-2011; 2020-21RCR task force (2014-16)Electives subcommittee (2013, 2014)Recruitment task force (2015) |
| 2007-2010 | CNACS | Member, 2007,2008Chair 2009-2010 |
| 2007-2012 | Simulation Advisory Committee | Member. Chair 2011/2012 |
| 2006-2010 | UCARE-AES [Cerner Academic Solutions) | Co-director 2006-2010 |
|  | (2010 merged within Simulation advisory committee) | Web security official |
| 2007-08 | Awards & recognition | Member |
| 2007 | LRC strategic planning task force | Member |
| 2006-07 | Faculty workload DB task force | Member |
| 2005-08 | CoNTAC, technology advisory committee | Member |
| 2005-06 | ITS Liaison |  |
| 2004 | Accelerated BS task force | Member |
| 2004 | Distance education task force | Member |
| 1997-99 | Information resources coordinating committee | member |

Department of Biomedical Informatics

|  |  |  |
| --- | --- | --- |
| Years | Committee | Role |
| 2022 – present | Curriculum committee | Chair |
| 2022 – present | Faculty search | Member, co-chair  |
|  |  |  |
|  |  |  |

1. Health Sciences Center Committees

|  |  |  |
| --- | --- | --- |
| Years | Committee | Role |
| 2023 - | CTSI Research Scientific Advisory Committee | member |
| 2017-2018 | Academic Integration: workforce  | Member |
| 2009-present | Institutional Review Board | Member/Panelist |
| 2019-2022 | RGE | Member |
| 2017-present | VPCAT | Senior mentor |

1. University Committees

|  |  |  |
| --- | --- | --- |
| Years | Committee | Role |

|  |  |  |
| --- | --- | --- |
| 2020 | Future of the Library – task force | member |
| 2019-2022 | University Senate Advisory committee for IT (SAC-IT) | member |
| 2014-2017 | University Teaching Committee | Member |
| 2009-2012 | Committee for a Tech. Enhanced Curriculum | Member 2009-2010; Chair 2010-2012 |

1. Professional Organizations

|  |  |  |
| --- | --- | --- |
| Years | Organization | Role |
| 2019- | Council for Advancement of Nursing Science | Member. CANS advanced methods conference planning committee chair, 2018-19 |
| 2019- | Western Institute of Nursing | Member; WINe (environmental special interest group) |
| 2017- | American Academy of Nursing | Member (Fellow). ITEP expert panel. |
| 2015- | International Society of Exposure Science (ISES) | Member.  |
| 1998-present | Utah Nursing Informatics Network (UNIN) | Chair, 2005 Treasurer, 2006-07, president-elect 2007-08 and 2019, president 2008-09 and 2020-22, past president 2009-10 |
| 2009 | Alliance for Nursing Informatics | UNIN rep |
| 2000-present | Health Information Management Systems Society (HIMSS); and Utah chapter (UHIMSS) | member |
| 1997-present | American Medical Informatics Association (AMIA)  | member |
| 2007-2019 | American Thoracic Society | Member |
| 1981-present | American Nurses Association | Member |
| 1981-present | Sigma Theta Tau International,  Gamma Rho chapter | Member(VP, 2008-09) |
| 2008-2015 | Oncology Nurses Society | Member |
| 2010-2018 | Gerontological Society of America | Member  |

1. Consultation and Boards

|  |  |  |
| --- | --- | --- |
| Mo/Yr  | Firm/Client  | Role |
| Grant/Application Reviews |
| 2021- | NIH,CSR. Clinical Informatics and Digital Health – CIDH | Standing panel member |
| 11/2020 | Food Allergy Research Network (FARE) | Grant reviewer |
| 10/2020 | NIH, CSR. BCHI (biomedical computing and health informatics) panel | Grant reviewer |
| 9/2020 | NIH/NINDS. SEP | Grant reviewer |
| 6/2020 | NIH, CSR. BCHI (biomedical computing and health informatics) panel | Grant reviewer |
| 6//2020 | NIH/NINDS. Data Harmonization SEP | Grant reviewer |
| 5/2020 | NIH, NLM. NLM digital curation. | Grant reviewer |
| 10/2019 | NIH, CSR. BCHI (biomedical computing and health informatics) panel | Grant reviewer |
| 5/2019 | PCORI | Application reviewer |
| 3/2019 | NIH, NIEHS. Human Health Exposure Analysis Resource (HHEAR) | Grant reviewer |
| 2/2019 | NIH, CSR. BCHI (biomedical computing and health informatics) panel | Grant reviewer |
| 1/2019 | NIH, CSR. mHealth applications | Grant reviewer |
| 12/2018 | PCORI Cycle 2 | Application reviewer |
| 10/2018 | NIH, CSR. BCHI (biomedical computing and health informatics) panel | Grant reviewer |
| 6/2018 | NSF Smart and Connected health panel | Grant reviewer |
| 2/2018 | NIH, CSR. Special emphasis panel | Grant reviewer |
| 5/1/2017 | CCTS | Application reviewer |
| 01/2017 | Patient-centered outcomes research institute (PCORI) Palliative care research panel | Grant reviewer |
| 01/2017 | NIH, NHLBI. Special Emphasis Panel. ZHL1 CCT-Q (C1). Technologies for the CART Demonstration Project for Collaborative Aging Research | Grant reviewer, study section chair |
| 11/2016 | National Science Foundation (NSF). Quantitative Approaches to Biomedical Big Data Panel A  (P170472) | Grant reviewer |
| 7/2016 | NIH, CSR. The Environmental Influences on Child Health Outcomes (ECHO) program, Data Analysis Center applications (RFA-OD-16-005) cross-institute special call | Grant reviewer, study section chair.  |
| 6/2016 | NIH, National Institute of Aging. Special section for RFA AG 16-021 Collaborative Aging (in place) Research using Technology (CART) (U2C) | Grant reviewer |
| 10/2015 | NIH, National Institute of Biomedical Imaging and Bioengineering (NIBIB) Biostatistical Methods and Research Design Study Section (BMRD) | Grant reviewer |
| 7/2015 | National Institutes of Health CSR, cross-institute special call | Grant reviewer |
| 7/2015  | Patient-centered outcomes research institute (PCORI) | Grant reviewer, special call |
| 2015 | NIH, National Institute of Nursing Research NINR) | Nursing Informatics Experts Panel  |
| 4/2014 | Patient-centered outcomes research institute (PCORI) | Grant reviewer |
| 2011-2014 | Agency for Healthcare Research & Quality (AHRQ) | Ad hoc grant reviewer |
|  |  |  |
| Other consultation and boards |
| 2021- | Environmental Health Research Institute for Nurse and Clinician Scientists (EHRI-NCS)1R25ES033452-01Castner, PIExternal Advisory Committee | Advisory Committee member |
| 2019-2022 | University of Utah: Utah Center for Clinical and Translational Science (CCTS). MPI: Dere, Hess. Internal Advisory Board | Advisory Board member |
| 2006-07  | University of Utah Orthopedic Hospital. | Orthopedic administration database design |
| 2005-06 | Fox Chase Cancer Center, Cheltenham, PA.  | Database development for research study“Management of Cancer-related Fatigue and Sleep Quality” (A. Barsevik, PI S. Beck, UT PI) |
| 2003 | University Hospitals and Clinics, Salt Lake City, UT.  | Data extraction for research study, Gastroenterology Department, |
| 2003 | University of Nebraska Medical Center, Omaha, NB.  | Database development, “Peer documentation evaluation forms”, Nursing Resources and Development. |
| 2/2000 | Health Informatics (RxRemedy/ Atmedica), Salt Lake City, UT.  | Knowledge engineering for web-based expert system |
| 2018-present | Utah Center for Clinical and Translational Science | Internal Advisory Board |
|  |  |  |

1. Other

|  |  |  |
| --- | --- | --- |
| Years | Committee | Role |
| 2011 - 2015 | Drools “Knitting Group” – transdisciplinary and multi-institutional collaboration to examine decision support tools in clinical healthcare and clinical research | Member, planning group |

**J. COMMUNITY SERVICE**

|  |  |  |
| --- | --- | --- |
| Dates | Organization/Site | Role/Activity |
| 2013-2018 | Midvale CBC Community Health Clinic | Informatics consultation |
| 2012-2013 | Health eDecisions National Standards for exchange of decision support artifacts | participant |
| 2008-2010 | National Cancer Institute | caBIG CTCAE review and harmonization (reviewer) |
| 2007-2008 | CDISC (Clinical Data Interchange Standards Consortium) | CDASH national data standards harmonization project (reviewer) |
| 2000 | Rape Recovery Center, SLC | DB consultation |
| 2000 | IHC Behavioral Health Wasatch Canyons | DB consultation |

**K. INTERNATIONAL TEACHING AND SERVICE ACTIVITIES**

|  |  |  |
| --- | --- | --- |
| Dates | Organization/Site | Role/Activity |
|  |  |  |

**L. OTHER**

*Continuing Education/Professional Development:*

Good Clinical Practice (GCP) CITI certification (2016 Dec; 2020 Jan)

CITI Human Subjects certification (Group 1, 2018 June; Group 2 2020 May)

LEAN training (2013).

U of U HR – Leadership development training (2014).

2014 Legacy of Life: Morris (Intermountain Research & Medical Foundation) – 3.5 contacts hours CE.

2015 Unlocking Best Practice: Nursing Research Conference (Intermountain Healthcare). 4.75 contact hrs CE

**SECTION II**

**M. CURRENT & PAST AREAS OF TEACHING RESPONSIBILITY**

1. Courses Taught Over Past 5 Years

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  Year | Course No. | Title | Credit Hrs. | Number | Role |
| 2023 S | BMI 6016 | BMI Data Wrangling & Qual | 3 | 35 | Co-instructor |
| 2022 U | NURS 6803 | Clinical Database Design | 3 | 6 | Single instructor |
| 2022 S | BMI 6016 | BMI Data Wrangling & Qual | 3 | 8 | Co-instructor |
| 2021 F | BMI 6010 | Fnd Hlth Informat | 2 | 30 | Co-instructor |
| 2021 U | NURS 6702 | Fnd Hlth Informat | 1.5 | 15 | Single instructor |
| 2021 U | NURS 6803 | Clinical Database Design | 3 | 6 | Single instructor |
| 2020 F | NURS 6702 | Fnd Hlth Informat | 1.5 | 67 | Co-instructor |
| 2020U | NURS 6803 | Clinical Database Design | 3 | 9 | Single instructor |
| 2019U | NURS 6803 | Clinical Database Design | 3 | 10 | Single Instructor |
| 2019U | NURS 6702-090 | Fnd Hlth Informat | 1.5 | 40 | Lead instructor |
| 2018 F | NURS 6702-090 | Fnd Hlth Informat  | 1.5 | 46 | Lead instructor |
| 2018 F | NURS 6702-091 | Fnd Hlth Informat  | 1.5 | 38 | Lead instructor |
| 2018 U | NURS 6702 | Fnd Hlth Informat | 1.5 | 48 | Lead instructor |
| 2018 U | NURS 6803/ BMI 6950-003 | Clinical Database Design | 3 | 13 | Single instructor |
| 2017 F | NURS 6702-091 | Fnd Hlth Informat | 1.5 | 40 | Single instructor |
| 2017 F | NURS 6702-090 | Fnd Hlth Informat | 1.5 | 37 | Single instructor |
| 2017 F | BMI 6203 | Clin Database Design | 2 | 40 | Lead instructor |
| 2017 F | BMI 6010 | Fnd Healthcare Informat | 2 | 36 | Co-instructor |
| 2017 U | NURS 6803 | Clin Database Design | 3 | 4 | Co-instructor |
| 2017 U | BMI 6950-003 | Clin Database Design | 3 | 1 | instructor |
| 2016 F | NURS 6810 / BMI 6010 | Fnd Hlthcare Informatics | 3 | 32 | Co-instructor |
| 2016 F | NURS 6815 | NI practicum | 3 | 1 | Lead instructor |
| 2016 U | NURS 6960 / BMI 6950 | Midvale Clinic Practicum | 1-4 | 2 | Lead instructor |
| 2016 U | NURS 6803 | Clin Database Design | 3 | 9 | Single instructor |
| 2016 U | NURS 7208-001 | Quantitative Research Design II | 2 | 7 | Single instructor |
| 2016 S | NURS 7207-001 | Quantitative Research Design | 2 | 7 | Single Instructor |
| 2016 S | NURS 6809 | NI Roles/Collaboration | 3 | 5 | Single Instructor |

1. Development of New Courses

|  |  |  |  |
| --- | --- | --- | --- |
| Year | Course No. | Title | Credit Hrs. |
| 2017  | NURS 6702 | Foundations of Health Informatics. Created 2017.Major Redesign 2018 | 1.5 |
| 2016 | BMI 6950/ NURS 6950 | Global health informatics practicum (expanded from previous Midvale CBC Informatics practicum) | 1-3 |
| 2013 | BMI 6950/ NURS 6950 | Midvale CBC Informatics Practicum (Midvale Clinic) | 1 – 3 |
| 2013 | BMI 6950 | Healthcare Quality Informatics (w J. Garvin) | 3 |
| 2012 | NURS 6806 | CS Fundamentals for Clinicians | 3 |
| 2007 | NURS 6004:  | Intro to Infor Technology (with Cummins and Hanberg) | 3 |

1. Honors Students Supervised or Taught

|  |  |  |
| --- | --- | --- |
| Year | Level/Student Name | Number |
|  |  |  |

1. Independent Study / Faculty Consultation

|  |  |  |
| --- | --- | --- |
| Year | Level/Student Name | Number |
| 2023 | PhD independent study – environmental science (Flynn) | 1 |
| 2023 | PhD independent study – data science (Johnny) | 1 |
|  2020 S | PhD independent study – Data Science (Dimas) | 1 |
|  2019 S | PhD independent study – R programming (Romero) | 1 |
|  2016 F | Teaching practicum | 1 |
|  2016 F | PhD research practicum | 3 |
| 2014 U | PhD ind study BMI – DB design (Mullhany) | 1 |
| 2013 S | PhD ind study BMI – Quality informat (Kalsy) | 1 |
| 2013 S | Phd ind study (Langheit) | 1 |
| 2012 F | PhD ind study (Lyons) | 1 |
| 2012 S | PhD ind study (Baraki, Madden, Nelson) | 3 |
| 2011 U | PhD ind study (Sanders, Reeves [PubHealth]) | 2 |
| 2011 U | Post doc, BMI (Young) | 1 |
| 2010 F | PhD faculty consultation  | 1 |
| 2010 F | PhD research practicum (Himes) | 1 |
| 2010 S | PhD Fac Consultation | 2 |
| 2010 S | MS ind study | 1 |
| 2010 S | PhD ind study | 2 |
| 2010 S | DNP ind study | 1 |
| 2010 S | PhD research practicum (Himes, Perri) | 2 |
| 2009 F | PhD (Guo, Thum-Thomas) | 2 |
| 2009 S | DNP | 1 |
| 2008 | MS | 3 |
| 2008 | DNP | 1 |
| 2007 | PhD | 1 |
| 2007 | MS | 2 |
| 2006 | MS | 1 |
| 2005 | MS | 2 |
| 2004 | MS | 2 |
| 2001 | MS | 2 |
| 2000 | MS | 1 |
| 1999 | MS | 2 |

1. Graduate Students Supervision
2. Master’s Thesis / Project

|  |  |  |
| --- | --- | --- |
| Year | Student Name | Role |
| 2023 | Bratton, Heather (BMI, nonthesis) | Member |
| 2022 | Morris, Talmadge (BMI, nonthesis) | Member |
| 2021 | Siripuram, Ramkiran (BMI, thesis) | Member |
| 2020 | Miller, Andrew (BMI MS) | Member |
| 2018 | Sneha Piriya P. (Engineering) | Member |
| 2014 | Fahim, C (Computational Engineering & Science) | Chair |
| 2014 | Caldwell, J (BMI) | Member |
| 2008 | Dalpias, D | Chair |
| 2006 | Palmquist, L | Member |
| 2006 | Allen, J | Chair |
| 2005 | LeBar, B | Member |
| 2005 | Goitz, F | Member |
| 2005 | Peters, M | Member |
| 2005 | Miller, H | Chair |
| 2004 | Bittinger, M | Member |
| 2004 | Greenwood, C | Chair |
| 2004 | Kotter, D | Member |
| 2004 | Bernstein, G | Member |
| 2004 | Kramer, R | Member |
| 2004 | James, N | Member |
| 2004 | Webb, K | Member |
| 2004 | Roemer, L | Member |
| 2003 | Barrett, W  | Member |
| 2003 | Church, R | Member |
| 2003 | Russell, J | Member |
| 2002 | Eklund, J | Chair |
| 2002 | Andrew (Nutt), T  | Member |
| 2002 | Roberts (Barker) | Member |
| 2001 | Konefal, I | Member |
| 2001 | Heyborne (Carpenter), B | Member |
| 2001 | Hilz, L | Member |
| 2000 | Shannon, P | Member |
| 1999 | McBride, K | Member |
| 1999 | Lyons, A | Member |

 B. Dissertations

|  |  |  |
| --- | --- | --- |
| Year | Student Name | Role |
| In process | Han, Seonggyun (DBMI) | Member |
| In process | Kotter, Adam | Member |
| In process | Reisenger, Raquel (BMI, MD-PhD) | Member |
| In process | Johnny, Jace | Advisor |
| 2022 | Vslides, Robert Henry (psych) | Member |
| In process (LOA 2022 fall) | Jung, Se-hee | Co-Chair w Litchman |
| In Process | Eengh, Eileen  | Chair |
| 2022 | Lemione, Jennifer | Member |
| In Process | Harvey, Jen | Chair |
| In Process | Radloff, Chrissy | Chair |
| In Process | Rudd, Betsy | Chair |
| In Process | Mansfield, Kelly | Member |
| In process | Kiser, Amber (BMI) | Member |
| In process | Vasquez, Janette (BMI) | Member |
| In process – defense scheduled | Mistry, Sejal (BMI, MD-PhD; F30) | Member |
| In process | Roman, Courtnee | Member |
| 2020 | Dimas, Jonathan | Chair |
| 2019 | Garcia, Antonio (BMI) | Member |
| 2019 | Thum-Thomas, N | Member |
| 2019 | Martial, Marc-Aurel | Chair |
| 2019  | Al-Qaaydeh, Sharifa | Member |
| 2018 | Sundar, Naresh (BMI) | Member |
| 2018 | Langkeit, Kevin | Chair |
| 2017 | Wong, A (BMI) | Member |
| 2017 | Taft, T (BMI) | Member  |
| 2017 | Macintosh, C | Chair |
| 2016  | Peters, M | Member |
| 2015  | Kalsy, M (BMI) | Member |
| 2015 | Lyons, A | Chair |
| 2015 | Madden, C | Advisor |
| 2014  | Kapsandoy, S | Chair |
| 2014 | Perri-Moore, S | Chair  |
| 2013  | Guo, J | Chair |
| 2013  | Iribarren, S | Member |
| Dropped 2017 | Baraki, K | Member |

C. DNP Capstone

|  |  |  |
| --- | --- | --- |
| Year | Student Name | Role |
| 2016 | Lorna Baer | Content expert |
| 2012 | Hewett, J (DNP, geron) | Content expert |
| 2012 | Driggs/Yearsley, C | Content expert |
| 2012 | Mayfield, A | Content expert |
| 2010 | Maruri, A | Content expert |
| 2010 | Passey, L | Content expert |
| 2009  | Osteyee, J | DNP Capstone leader |
| 2009  | Cheeseman, S (DNP + MS certificate) | Chair, DNP Capstone leader |
| 2009 | Roberts, L | Chair, DNP Capstone leader |
| 2009 | Jensen, L | Member, DNP Capstone leader |
| 2009 | Martin, S | Content expert |
| 2009 | Jarvis, S | Content expert |

1. Post-doctoral

2022 Sloss, Liz (CON T32)

2015 Clutter, Justin (BMI NLM post-doc). MD/MS fellow. *Chair for MS*

2013 Hirshberg, Eliotte (MD, MSCI). *Co-chair for MSCI*

1. Other

2019 Morgan, Taylor (Pharm D) Practicum Mentor

2023 Natalya Alekhina F31 co-sponsor

E. Faculty mentoring:

*VPCAT scientific mentor*

Guo, Jia-Wen – senior/primary scientific mentor for K (funded)

Overbury Rebecca – scientific mentor for VPCAT, co-mentor for K application

*VPCAT senior mentor*

Cirulis, Megan

Delaney, Rebecca

Groat, Danielle (IHC)

Hendrickson-Cahill, Whitney

Knighton, Andrew (IHC)

Visnovsky, Lindsay (VA)

Lee, Catherine

Glotzbach, Jason

Lin, Jody

Faculty mentoring: other

Zoucha, S. (peds) usability testing

Martial, M (BYU nursing) career mentoring

Alderden, J (nursing) career mentoring – now faculty at U of Idaho

Litchman, M (nursing) career and research mentoring, usability testing

Taylor Swanson (nursing) research mentoring

Kalsy, M (BMI) career mentoring, VA scholar

Luo, G (BMI) career and research mentoring. Faculty at U of Washington, R01 funded

Abdelrahman, S. (BMI) career mentoring