

Ray Hylock

Associate Professor

Health Services and Information Management



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ACADEMIC BACKGROUND

Doctor of Philosophy Informatics (Health Informatics Concentration) University of Iowa Iowa City, IA	2013
Master of Science Informatics (Health Informatics Concentration) University of Iowa Iowa City, IA	2012
Bachelor of Science Business Administration (High Technology Management Concentration) – Magna Cum Laude California State University, San Marcos San Marcos, CA	2007

ACADEMIC EXPERIENCE

Associate Professor Health Services and Information Management East Carolina University Greenville, NC	July 2019-Present
Assistant Professor Health Services and Information Management East Carolina University Greenville, NC	July 2013-June 2019

COURSES TAUGHT

COHE 6430 Database Systems in Health Care (2013-2019)/Health Data Management (2020+)	Fall 2013-2014 & Spring 2016-Present
COHE 6470 Health Information Privacy and Security Co-taught with Dr. Susie Harris in the fall of 2014 As of fall 2015, I have assumed full responsibility for this course	Fall 2014-Present
COHE 6490 Foundations of Health Information Technologies	Spring 2014-2015, Fall 2015-2019, & Summer 11 2020
COHE 6550 Health Informatics Project Management and Design	Summer 11 2015 & Spring 2016, 2018-Present
HIMA 6060 Health Informatics	Fall 2020-Present
HSMA 4065 Management of Health Care Operations and Patient Flow Co-taught with Dr. Xiaoming Zeng One-time assignment after the instructor left ECU just prior to the start of the semester	Spring 2017
PUBH 8463 Health Information Systems	Fall 2018, 2020

OTHER TEACHING ACTIVITIES

Student Advising

Thesis Committee Member Jacob Bell, MS in Network Technology, Information Security Concentration	Summer 2019-Fall 2019
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Dissertation Committee Member Jessica Goodman, PhD in Medical Family Therapy	Fall 2017-Spring 2019
Graduate Certificate Program Director Health Care Administration Graduate Certificate Program	Fall 2016-December 2018

Course Creation

COHE 6590 Created the course based on its course proposal	Spring 2020-Present
COHE 6590 Designed and proposed the course to meet the new accreditation standards	Fall 2019-Spring 2020
PUBH 8463 Created the course based on its course proposal	Fall 2018
COHE 6550 Created the course (for summer 11) based on its course proposal	Spring-Summer 2015
COHE 6550 Designed and proposed the course as part of the MS in HIM optimization process	Spring-Fall 2014
COHE 6470 Created the security portion of the course based in part on its course proposal	Summer-Fall 2014
COHE 6490 Created the course based in part on its course proposal	Fall 2013-Spring 2014

Course Redesign

HIMA 6060 Complete redesign of the course to comply with new accreditation standards	Fall 2020
COHE 6430 Complete redesign of the course to comply with new accreditation standards Renamed to: Health Data Management	Spring 2020
COHE 6550 Redesigned the course from its original summer 11 design to fit a spring format	Fall 2015-Spring 2016
COHE 6470 Complete redesign of the privacy portion of the course (newly assigned)	Summer-Fall 2015
COHE 6430 Complete redesign of the course upon initial assignment	Summer-Fall 2013

Guest Lectures

HIMA 4153/COHE 6640 Project Management: Overview and Tools	Fall 2018-Present
HSMA 3045 Data Management and Governance	Spring 2018-Present
HIMA 3120 What is Informatics?	Fall 2014-Present
HDFS 8403 Analyzing Health Care Data: A Brief Database and Data Analytics Example	Fall 2016
MPH 6702 Introduction to Databases: An Access Example	Spring 2015 & 2016
COHE 6600 The Legal Health Record and e-Discovery	Fall 2014

Graduate Program Learning Assessments

COHE 6470

Spring 2018-2019

Prepare two (one on privacy and the other on security) IPAR outcome assessment reports for the Master of Science in Health Informatics and Information Management and the Graduate Certificate in Health Informatics

COHE 6550

Spring 2018-2019

Prepare two (one on systems and software requirements analysis leading to a request for proposal and the other on systems and software design) IPAR outcome assessment reports for the Master of Science in Health Informatics and Information Management and the Graduate Certificate in Health Informatics

COHE 6430

Spring 2014-2017

Prepare an IPAR outcome assessment report for the Master of Science in Health Informatics and Information Management and the Graduate Certificate in Health Informatics

Masters Comprehensive Exam Design/Grading

Comprehensive Exam Grading

Spring 2016-Present

Grade the privacy, security, and database portions of the Master of Science in Health Informatics and Information Management comprehensive examination – spring, summer, and fall

Comprehensive Exam Design

Fall 2015

Designed the privacy, security, and database portions of the Master of Science in Health Informatics and Information Management comprehensive examination

REFEREED ARTICLES

Goodman, J., Lamson, A., **Hylock, R.**, Delbridge, T., & Jensen, J (forthcoming). Emergency Department Patient Subgroups: Development of an Empirical, Theory-Grounded Definition Using Population Health Data and Machine Learning. *Family, Systems, and Health*.

Hylock, R. & Zeng, X. (2019). [A Blockchain Framework for Patient-Centered Health Records and Exchange \(HealthChain\): Evaluation and Proof-of-Concept Study](#). *Journal of Medical Internet Research*, 21(8), PMID: 31471959.

Hylock, R., Bell, P., Harris, S., Woodward, J., & Campbell, R. (2017). [Optimizing the Master of Science Degree in Health Informatics and Information Management – Part 2](#). *Educational Perspectives in Health Information Management*. Fall.

Hylock, R. & Harris, S. (2017). [Healthcare Database Management and HIIM Students: Challenges and Instruction Strategies - Part 2](#). *Educational Perspectives in Health Information Management*. Summer.

Harris, S. & **Hylock, R.** (2017). [Was the Hyperglycemia due to a Bottle of Bad Insulin?](#) *Journal of Case Studies*, 35(1), 91-101.

Hylock, R. & Harris, S. (2016). [Healthcare Database Management and HIIM Students: Challenges and Instruction Strategies - Part 1](#). *Educational Perspectives in Health Information Management*. Spring.

Hylock, R. (2016). [Cooperative Heuristics for the Federated View Selection Problem](#). *International Journal of Emerging Technology and Advanced Engineering*, 6 (4), 80-89.

Hylock, R. (2016). [The Federated View Selection Problem](#). *International Journal of Emerging Technology and Advanced Engineering*, 6 (3), 142-152.

Hylock, R. (2016). [UPC: Large-Scale Memory Efficient Java Primitive Collections](#). *Journal of Software*, 11 (3), 251-271.

Hylock, R. & Currim, F. (2013). [A Maintenance Centric Approach to the View Selection Problem](#). *Information Systems*, 38 (7), 971-987.

Boudreau, R. L., Spengler, R. M., **Hylock, R. H.**, Kusenda, B. J., Davis, H. A., Eichmann, D. A., Davidson, B. L. (equal credit to first two authors) (2013). [siSPOTR: a tool for designing highly specific and potent siRNAs for human and mouse](#). *Nucleic Acids Research*, 41 (1), 1-12.

Lu, D., Street, W. Nick, Currim, F., **Hylock, R.**, & Delaney, C. (2009). [A Data Modeling Process for Decomposing Healthcare Patient Data Sets](#). *Online Journal of Nursing Informatics*, 13 (1), 1-26.

SUBMITTED ARTICLES

Goodman, J., **Hylock, R.**, Lamson, A., Delbridge, T., & Jensen, J. Machine Learning Clustering: A Translational Approach to Emergency Department Utilization. *Health Services Research*.

REFEREED PROCEEDINGS

Full Papers

Hylock, R., Street, W. Nick, Lu, D., & Currim, F. (2008). NursingCareWare: Warehousing for Nursing Care Research and Knowledge Discovery. *3rd INFORMS Workshop on Data Mining and Health Informatics*.

Abstract Only

Ahuja, M., Schappet, J., Lorentzan, R., Wang, Y., **Hylock, R.**, Leslie, K., Davis, H., Knosp, B., Santillan, M., Santillan, D. (2014). Sample and Clinical Information Link (SCI-Link) - Standardized Data Registry Management System. *AMIA Joint Summits on Translational Science Proceedings*.

REFEREED PRESENTATIONS

International

Hylock, R., Street, W. Nick, Lu, D., & Currim, F. (2008, October). NursingCareWare: Warehousing for Nursing Care Research and Knowledge Discovery. *3rd INFORMS Workshop on Data Mining and Health Informatics*, Washington, District of Columbia.

National

Harris, S. & **Hylock, R.** (2015). Uncaptured Diabetes Data, until ICD-10. *2015 AHIMA Data Summit: Beyond ICD-10*, Greenville, North Carolina.

Hylock, R. (2014). Healthcare Database Management and HIM Students: Challenges and Instruction Techniques. *AHIMA Assembly on Education Summer Symposium July 2014*, Chicago, Illinois.

State

Harris, S. & **Hylock, R.** (2016, May). Diabetes and ICD-10, Improving Data Capture. *NCHIMA 66th Annual Meeting*, Asheville, North Carolina.

NON-REFEREED PRESENTATIONS

Local

Campbell, R., **Hylock, R.**, Kapoor, A., & Zeng, X., (2020, February). Introduction to FHIR. *College of Allied Health Sciences - Brown Bag Series*, Greenville, North Carolina.

Hylock, R. (2019, March). Blockchain + Healthcare = Hype or Hope? *College of Allied Health Sciences - Brown Bag Series* Greenville, North Carolina.

Woodward, J., Zeng, X., & **Hylock, R.** (2016). Impact of alcohol sale regulation on drug abuse - a secondary analysis of national data sets. *ECU Research and Creative Achievement Week*, Greenville, North Carolina.

State

Hylock, R. (2018, February). HealthChain: A Patient-Centered Blockchain Framework. *East Carolina University Technology Showcase*.

Hylock, R. (2018, February). HealthChain: Patient-Centered Health Records and Exchange via Blockchain. *Duke Informatics Research Seminar Series*, Greenville, North Carolina.

Hylock, R. (2016, March). Challenges and Techniques for Querying Healthcare Databases. *NCHIMA Coding Roundtable*, Greenville, North Carolina.

Harris, S. & **Hylock, R.** (2015, November). Uncaptured Diabetes Data, until ICD-10. *Duke Informatics Research Seminar Series*, Greenville, North Carolina.

Hylock, R. (2013, November). Beyond Relational: A Database Architecture for Clinical Data Management. *Duke Informatics Research Seminar Series*, Greenville, North Carolina.

RESEARCH GRANTS

Funded

ENC Health Atlas | Too many to list Aug-Dec 2020
North Carolina 2020 COVID-19 Recovery Act House Bill 1043 (Session Law 2020-4). Co-I (50% effort). Total award: \$500,000 from August 2020 through December 2020

BCData360 | Zeng, Z., Toriello, P., Hylock, R., & Kapoor, A. 2019-2021
Kate B. Reynolds Charitable Trust: Beaufort County Substance Misuse Data Analytics Project (BCSMDA) – known as BCData360. Co-PI. Total award: \$437,491 from January 2019 through December 2021.

VCAN | Scott, E., Swanson, M., Tyndall, D., Jones, L., Bradshaw, D., & Hylock, R. 2016-2017
Versant Center for the Advancement of Nursing (VCAN) Grant Award: Building a National Research Project for the Advancement of Nursing. Data Architect. Total award: \$1,395,646 from January 2016 thru August 2017.

Start-Up | Hylock, R. 2013-2015
Start-Up Package: A request for startup funds. Principal investigator. Total award: \$85,276.98.

Unfunded

NRT | Mitra, S., Bowler, M., Gudivada, V., Kruse, J., Moysey, S., Hylock, R., Liu, H., & Wasklewicz, T. 2020
Proposal No:19-0613 - NRT-HDR: De-convolving barriers to data assimilation and communication across graduate STEM disciplines. Type: other. Total requested: \$2,831,211.48.

CHNA | Bowler, M., Bowler, J., Jones, K., Hylock, R., & Schoemann, A. 2017
Center for Survey Research (CSR) Eastern North Carolina (ENC) Regional Community Health Needs Assessment (CHNA). Type: investigator. Total requested: \$804,183.60.

Environmental Tracking | Kearney, G, Jones, K., Hylock, R., & Kapoor, A. 2017
North Carolina - Environmental Public Health Tracking. Type: co-investigator. Total requested: \$1,416,708.35.

Workforce Training | Zeng, X., Hylock, R., & Brown, A. 2015
Information Technology Training for Incumbent Health Care Workforce. Type: co-investigator. Total requested: \$112,778.50.

REFEREED DATASETS AND SOFTWARE

HealthChain Server 2019
Proof-of-concept server (i.e., node) implementation for *HealthChain*. Single-node system only for testing the novel components. **Languages:** Java and SQL. **Documentation:** Javadoc. **Lines:** 16,061.

Published in: Hylock, R. & Zeng, X. (2019). [A Blockchain Framework for Patient-Centered Health Records and Exchange \(HealthChain\): Evaluation and Proof-of-Concept Study](#). *Journal of Medical Internet Research*, 21(8).

HealthChain Web Client 2019
Proof-of-concept client web interface for *HealthChain*. It is a simple JSP-enabled version of the Gentelella Alela template. **Languages:** Java, JSP, JavaScript, HTML, and SQL. **Documentation:** Javadoc. **Lines:** 42,651.

Published in: Hylock, R. & Zeng, X. (2019). [A Blockchain Framework for Patient-Centered Health Records and Exchange \(HealthChain\): Evaluation and Proof-of-Concept Study](#). *Journal of Medical Internet Research*, 21(8).

[Chameleon Hashing Library](#)

2019

Implementation of *public-coin chameleon hashing* (PCCH) for redactable block support in *HealthChain*. **Language:** Java. **Testing:** JUnit. **Documentation:** Javadoc. **Lines:** 2,061 (1,536 project + 525 tests).

Published in: Hylock, R. & Zeng, X. (2019). [A Blockchain Framework for Patient-Centered Health Records and Exchange \(HealthChain\): Evaluation and Proof-of-Concept Study](#). *Journal of Medical Internet Research*, 21(8).

[Proxy Re-Encryption Library](#)

2019

Implementation of the *AFGH proxy re-encryption* scheme with the modifications proposed in *HealthChain*. All twenty-two cryptographic proofs related to the submitted modifications have individual JUnit tests. **Language:** Java. **Testing:** JUnit. **Documentation:** Javadoc. **Lines:** 11,608 (6,488 project + 5,120 tests).

Published in: Hylock, R. & Zeng, X. (2019). [A Blockchain Framework for Patient-Centered Health Records and Exchange \(HealthChain\): Evaluation and Proof-of-Concept Study](#). *Journal of Medical Internet Research*, 21(8).

[Alliance Regional Medical Center \(ARMC\) Datasets](#)

2017

The datasets provide fabricated information for the fictional hospital Alliance Regional Medical Center (armac). All identifying information (e.g., id's, names, dates, addresses, occupations, etc.) are randomly created. Disease and medication assignments follow distributions and patterns identified in multiple healthcare datasets. Errors and outliers have been introduced to simulate those found in real healthcare environments (e.g., missing and unreasonable values). The data comes in ten varieties (from 10 to 1 million patients) and is compatible with many database management systems. **Language:** SQL. **Size:** 1.75 GB zip.

Published in: Hylock, R. & Harris, S. (2017). [Healthcare Database Management and HIIM Students: Challenges and Instruction Strategies - Part 2](#). *Educational Perspectives in Health Information Management*.

[OpenJDK9 sun.misc.Unsafe bulk-memory operation expansion](#)

2016

A customized version of Java (using OpenJDK9) with bulk-memory operation support. The UPC software project comes in two flavors: one based on the publicly available JVM/JDK and the other on this customized JVM/JDK. Testing indicates these enhancements significantly improve performance of `sun.misc.Unsafe`-enabled software, which, in this case, is the UPC software package. **Languages:** Java and C/C++. **Lines added to JDK/JVM:** 5,089.

Published in: Hylock, R. (2016). [UPC: Large-Scale Memory Efficient Java Primitive Collections](#). *Journal of Software*, 11 (3), 251-271.

[UPC - High Performance Memory Efficient Java Primitive Collections](#)

2016

Array, list, hash map, hash set, and matrix primitive collections in Java utilizing the `sun.misc.Unsafe` non-public API. It provides $2^{63} - 1$ objects (Java addresses only $2^{31} - 1$ spaces) with a destroy feature (a standard memory reclamation option in high performance computing (HPC) favored languages not supported by Java), and primitive collection support (also not supported by Java apart from arrays). **Language:** Java. **Testing:** Junit. **Documentation:** Javadoc. **Lines:** 649,547 (619,665 project + 29,882 tests).

Published in: Hylock, R. (2016). [UPC: Large-Scale Memory Efficient Java Primitive Collections](#). *Journal of Software*, 11 (3), 251-271.

[siSPOTR - siRNA Sequence Probability-of-Off-Targeting Reduction](#)

2013

Project is available as an online service hosted by the [Institute for Clinical and Translational Science at the University of Iowa](#). As of February 2014, the code is available under the Apache License via [GitHub](#).

Published in: Boudreau, R. L., Spengler, R. M., Hylock, R. H., Kusenda, B. J., Davis, H. A., Eichmann, D. A., Davidson, B. L. (equal credit to first two authors) (2013). [siSPOTR: a tool for designing highly specific and potent siRNAs for human and mouse](#). *Nucleic Acids Research*, 41 (1), 1-12.

WORKING PAPERS

Goodman, J., Lamson, A., **Hylock, R.**, Delbridge, T., & Jensen, J. Operationalizing frequent emergency department use: A systematic review.

Goodman, J., Lamson, A., **Hylock, R.**, Delbridge, T., & Jensen, J. Walking Beyond the Straight and Narrow: Emergency Department Utilization Through a Systemic Lens.

Hylock, R., Harris, S., & Baker, E.: *Reducing Hypoglycemia with Continuous Blood Glucose Monitoring System Patient Satisfaction and Training: Case Report*. Target: Health Care Manager.

Hylock, R. & Harris, S.: *OCR Breach Reports – What's Past is Prologue*. Target: Health Care Manager.

Hylock, R., Cellucci, L., & Baker, E.: *eClinicalWorks Fraud – What Would You Have Done?* Target: Journal of Case Studies.

Hylock, R.: *An Analysis of the Personal Grid Health Record Framework*.

Hylock, R. *Beyond Relational: A Database Architecture for Clinical Data Management*.

Hylock, R. & Baker, E.: *An Optimal Off-Target Detection Algorithm with IUPAC and Unbounded Mismatch Support*.

WORKING BOOKS

Hylock, R.: *Database Systems in Health Care*.

MEMBERSHIPS

American Health Information Management Association (AHIMA)	2014-Present
American Medical Informatics Association (AMIA)	2013-Present
Association of University Programs in Health Administration (AUPHA)	2013-Present
Institute for Operations Research and Management Sciences (INFORMS)	2008-2009

SERVICE TO THE UNIVERSITY

Department Assignments

Chair Personnel Committee	Summer 2019-Present
Chair Promotion & Tenure Committee	Summer 2019-Present
Chair Faculty Search Committee: Big Data & Analytics	Spring 2018-Spring 2019
Member Personnel Committee	Fall 2015-Spring 2019
Member Faculty Search Committee	Fall 2015-2016
Member Marketing Committee	Fall 2013-Present
Member Academic Affairs Committee	Fall 2013-Present
Member Ad Hoc Master's in HIM Optimization Committee	Summer 2014-2015

College Assignments

Member Elections Committee	Spring 2020-Present
Chair Honors and Awards Committee	Summer 2016- Spring 2020
Member Research and Scholarly Activities Committee	Fall 2016-Present
Member Compliance Committee	Fall 2014-Present
Member Honors and Awards Committee	Fall 2014-2016

University Assignments

Member SACSOC Workgroup Eight: Quality Enhancement Plan Selection Committee	Fall 2020-Present
Member Information Resources Coordinating Council	Fall 2020-Present
Ex-officio Graduate Council – Health Sciences Representative	Fall 2018-Present
Member MS in Data Science Working Group	Summer 2019-Present
Member PhD in Data Science Exploratory Working Group	Spring 2018-Present

Member | BS in University Studies Faculty Oversight Committee

Fall 2017-Summer 2020

Member | Parking and Transportation Committee

Fall 2014-2017

Other Institutional Service Activities

Python Introduction

Office for Faculty Excellence Summer Research and Statistics Workshop Series

Summer 2018-Summer 2019

Healthcare Informatics Panelist

Big Data at ENC & Business of Healthcare Symposium

Spring 2017

Graduate Certificate Program Director

Health Care Administration Graduate Certificate Program

2016-2018

Student Group Co-Faculty Advisor

Student Health Information Management Association

2015-2018

SERVICE TO THE PROFESSION

Committee/Task Force/Workgroup

Member | AHIMA CEE: Curriculum Workgroup

2017-2018 (CY)

Member | AHIMA Health Informatics Case Study Task Force

2017 (CY)

Member | AHIMA Graduate Health Informatics Curriculum Task Force

2016-2017 (CY)

Member | AHIMA CEE: Graduate Resource Alliance

2015-2016 (CY)

Article/Manuscript

Reviewer | Journal of Medical Internet Research

2019-Present

Reviewer | International Journal of Environmental Research and Public Health

2019-Present

Reviewer | Journal of Software

2016-Present

Reviewer | Perspectives in Health Information Management

2015-Present

Reviewer | SAGE Open

2016

Reviewer | International Journal of Computational Intelligence Systems

2015

Conference Paper

Reviewer | AMIA Health Informatics Symposium

2017-Present

Reviewer | AMIA Annual Symposium

2016-Present

Reviewer | AMIA Joint Summits on Translational Science

2014-Present

Reviewer | Hawaii International Conference on System Sciences

2013-Present

Textbooks

Technical Reviewer | AHIMA Press

Fall 2020

Introduction to Health Information Technology, Fourth Edition. Complete review of the textbook and instructor materials for completeness, correctness, and currency.

Technical Reviewer | AHIMA Press

Spring 2017

Calculating and Reporting Healthcare Statistics, Fifth Edition. Reviewed all statistical calculations in the textbook and instructor materials.

FACULTY DEVELOPMENT

DE Professional Development

Distance Education Faculty Development Modules Completed a 70-minute session on "Canvas Training – Getting Started with Canvas" Greenville, NC Completed an 80-minute session on "Canvas Training – Assignments, Quizzing" Greenville, NC	2020
Distance Education Faculty Development Modules Completed a one-hour session on "LMS Review & Channels in Mediasite" Greenville, NC	2019
Distance Education Faculty Development Modules Completed a one-hour session on "New Features in Blackboard and My Mediasite" Greenville, NC	2018
Distance Education Faculty Development Modules Completed a one-hour session on "Blackboard Outcomes" Greenville, NC	2017
Distance Education Faculty Development Modules Completed a one-hour session on "Tools for Delivering Distance Education" Greenville, NC	2016
Distance Education Faculty Development Modules Completed a one-hour session on "Tools for Delivering Distance Education" Greenville, NC	2015
Teaching with Technology Summer Academy Completed 30 hours of teaching with technology training to enhance both face-to-face and distance education instruction Greenville, NC	2014
Distance Education Faculty Development Modules Completed all six modules Greenville, NC	2014
Distance Education Faculty Development Modules Completed all five modules Greenville, NC	2013

Professional Seminar/Workshops

AMIA 2018 Informatics Educators Forum Attended a three-day conference on informatics education for the health domain. Workshops and sessions attended focused on the new accreditation standards and techniques for delivering high-quality informatics education in this space. New Orleans, LA	2018
12th AMC Security & Privacy Conference Attended a three-day conference on privacy and security issues related to health care. Content learned will be integrated into the courses I teach. Chapel Hill, NC	2016
Beginning Grant Writers Workshop Series Completed a five-part (10 hour) series on beginning grant writing sponsored by Research and Graduate Studies, the Graduate School, and the Office for Faculty Excellence Greenville, NC	2015

Other Professional Development

Records Retention and Management ECU records retention and management Cornerstone module Greenville, NC	2020
Information Security Best Practices for ECU Management ECU information security best practices for ECU management (academic track) Cornerstone module Greenville, NC	2020
Kronos 7 Manager and SuperAdmin Training ECU Kronos 7 Manager and SuperAdmin Cornerstone module Greenville, NC	2020
Conflicts of Interest, External Professional Activities for Pay, and the AIR System ECU conflicts of interest, external professional activities for pay, and the AIR system training Greenville, NC	2019
Employee Best Practices in Information Security ECU employee best practices in information security Cornerstone module Greenville, NC	2019

ECU Equal Employment Opportunity Compliance and HR Best Practice Training ECU EEOC and HR Best Practice Training in SHRA/CSS and EHRA Recruitment and Selection – modules 1-3 Greenville, NC	2018
Institutional Review Board Training IRB Training – Social/Behavioral. Completed the 12 required modules Greenville, NC	2018
Human Research: Data or Specimens Only Research: 1 - Basic Course Completed the Massachusetts Institute of Technology Affiliates Human Research Training Greenville, NC	2017
Office of Faculty Excellence Statistics/Research Summer Series Completed 27 hours of statistics and research training Greenville, NC	2017
Employee Best Practices in Information Security ECU employee best practices in information security Cornerstone module Greenville, NC	2017
CommonSpot Beginner Training Completed a two-hour training session on CommonSpot Greenville, NC	2016
Institutional Review Board Training IRB Training – Social/Behavioral Greenville, NC	2015
Kronos for Exempt Employees Completed the Kronos training module Greenville, NC	2015
ECU Equal Employment Opportunity Compliance in EPA Search Processes Training ECU EEOC in EPA Search Processes 2014 (OED) Training Greenville, NC	2015
Preventing Discrimination and Sexual Violence Completed requisite training Greenville, NC	2014
Peer Classroom Observation Training Session Completed requisite training Greenville, NC	2014
Sedona Training Session Completed requisite training Greenville, NC	2014
Preventing Workplace Harassment Completed requisite training Greenville, NC	2013
Preventing Unlawful Discrimination Completed requisite training Greenville, NC	2013

PRIOR ACADEMIC EXPERIENCE

Research Assistant Institute for Clinical and Translational Science University of Iowa Iowa City, IA	January 2010-May 2013
Instructor Management Sciences University of Iowa Iowa City, IA	Spring 2011
Head Teaching Assistant Management Sciences University of Iowa Iowa City, IA	Fall 2009
Research Assistant Management Sciences & College of Nursing University of Iowa, Iowa City, IA	Spring 2009
Research Assistant College of Nursing University of Iowa Iowa City, IA	Fall 2008-Spring 2009
Teaching Assistant Management Sciences University of Iowa Iowa City, IA	Fall 2008
Head Teaching Assistant Management Sciences University of Iowa Iowa City, IA	Spring 2008
Teaching Assistant Management Sciences University of Iowa Iowa City, IA	Fall 2007

Teaching Assistant

College of Business Administration | California State University, San Marcos | San Marcos, CA

Fall 2006-Spring 2007

AWARDS

Scholar-Teacher Award

East Carolina University

2018

Dean's Award for Outstanding Performance in Teaching

College of Allied Health Sciences, East Carolina University

2016

Outstanding Student from High Technology Management

College of Business Administration, California State University, San Marcos

2007