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Updated: 01/03/2017

EDUCATION

Doctor of Philosophy, Information Sciences and Technology, *Pennsylvania State University, PA.* [2010]

Bachelor of Science, Computer Science & Engineering, SRM College of Engineering, Chennai, *India.* [2001]

PROFESSIONAL EXPERIENCE

- 3/2014 – Present **Adjunct Faculty**, Department of Veterans Affairs, Jesse Brown VA Medical Center, Chicago, IL
- 8/2013 – Present **Assistant Professor**, Department of Biomedical and Health Information Sciences, College of Applied Health Sciences, University of Illinois at Chicago, IL
- 10/2013 – Present **Assistant Professor**, Graduate College, University of Illinois at Chicago, IL
- 1/2016 – Present **Adjunct Instructor**, Department of Continuing Studies, University of Illinois at Chicago, IL.
- 1/2012 – 8/2013 **Associate Research Scientist**, *Center for Cognitive Studies in Medicine and Public Health*, The New York Academy of Medicine, NY [Center Director: Vimla L. Patel]
- 1/2010 – 12/2011 **AHRQ Post Doctoral Fellow**, *Center for Cognitive Informatics and Decision Making*, University of Texas Health Science Center at Houston, TX [Mentors: Vimla L. Patel and Jiajie Zhang]
- 8/2003 – 10/2009 **Graduate Research Assistant**, *College of Information Sciences and Technology*, Penn State University, University Park, PA [Thesis Committee: Madhu C. Reddy (*Chair*), Michael McNeese, Mary

Beth Rosson, Michelle Miller-Day]

2/2003–7/2003

Technology Associate, Balanced Environmental Solutions
(formerly known as Blazosky Associates, Inc.), State College, PA

GRANT SUPPORT

Current Grants

George H. Miller Memorial Fund Health Science Student Research (HSSR) Mentorship Award **1/2016–8/2016**

Investigation of Inpatient Rounding Practices

University of Illinois, College of Medicine

Role: *Principal Investigator*

The goal of the research study is to develop and evaluate an electronic medical record-integrated rounding tool to support effective communication in inpatient medicine service.

University of Illinois Interdisciplinary Grant **2/2016–2/2017**

Collaborative Dashboard for Patient Care Transitions

University of Illinois, College of Engineering

Role: *Co-Principal Investigator (PI: G. Elisabeta Marai)*

The goal of the research study is to design and evaluate a collaborative dashboard for visualizing information to support communication and decision making during care transitions.

University of Illinois Pilot Grant **7/2015–9/2016**

An Exploratory Investigation of Error Generation and Correction during Medication Ordering

University of Illinois, College Applied Health Sciences

Role: *Principal Investigator*

The goal of the research study is to investigate the factors that lead to the voiding of medication orders with a focus on explicating the reasons for medication errors.

National Science Foundation **04/15–07/2017**

Towards Meaningful Information Transfer: Role of Interdepartmental Communication

National Science Foundation (NSF) CISE Grant

Role: *Principal Investigator*

The goal of the research study is to investigate the impact of standardized tools on safety in inter-departmental handoffs between emergency department and intensive care unit.

Pending Grants

AHRQ R21 **(Submitted 10/2016)**

An Etiology for Medication Ordering Error Generation and Recovery in CPOE Systems

Role: *Principal Investigator*

The goal of this project is to identify the causal reasons underlying medication ordering errors – social, cognitive and organizational – to inform the development of evidence-based guidelines for the design of interventions to promote medication safety.

Systematic Review Competition *(Submitted 02/2017)*

Emergency Strategic Clinical Network

Transition in Care from Paramedics to Emergency Department Nurses: A Systematic Review

Role: *Co-Investigator (PI: Gudrun Reay)*

The goal of this proposal is to conduct a comprehensive systematic review of studies that examine handovers between EMS practitioners and ED nurses.

Systematic Review Competition *(Submitted 02/2017)*

Emergency Strategic Clinical Network

Emergency Department-based Interventions for Effective Care Transitions to Primary Care – A Systematic Review

Role: *Co-Investigator (PI: Fariba Aghajafari)*

The goal of this proposal is to examine whether ED-based care transition interventions are effective in reducing return visits to the ED and increasing follow-up visits with primary care providers for adult patients?

National Library of Medicine T15 *(Submitted 04/2016)*

Chicago Initiative for Biomedical Informatics and Data Science Training (CIBIDS)

Role: *Co-Investigator (PI: Justin Starren)*

The Chicago Initiative for Biomedical Informatics and Data Science Training (CIBIDS) proposal represents a joint effort by three major institutions in the Chicago area – Northwestern University, University of Illinois at Chicago, and University of Chicago – to advance the training of future Biomedical Informatics and Data Science (BIDS) researchers.

Past Grant Support

UIC Campus Research Board Grant *04/01/13 – 12/30/14*

Investigating the benefits and unintended consequences of communication technology use in hospitals.

Role: *Co-Investigator (PI: Karen Dunn Lopez)*

The goal of the study was to examine the feasibility of use of multiple information and communication technologies in medical-surgical settings.

JSMF 220020152 *01/01/12 – 07/30/13*

Cognitive Complexity and Error in Critical Care

James S McDonnell Foundation (JSMF)

Role: *Co-Investigator (PI: Vimla Patel)*

The goal of the study was to understand the medical errors and complexity in critical care settings, with specific emphasis on highlighting the underlying factors leading to errors.

AWARDS

- 2016 UIC Provost's Excellence in Undergraduate Advising Award Nominee
- 2015 George H. Miller Student Research Mentoring Award [*Electronic Health Record-Integrated Rounding Communication Tool Design and Evaluation in Family Medicine Unit*]
- 2012 AMIA Distinguished Paper Award [*Handoff Tool Intervention Evaluation Study*]
- 2010 Diana Forsythe Award for Ethnographic Research [Co-author: *Challenges to Effective Crises Management: Coordinating Emergency Medical Services and Emergency Department Teams*]
- 2009-11 Agency for Healthcare Research and Quality (AHRQ) Post-doctoral Fellowship

PROFESSIONAL COMMITTEES

Research Steering Committee

Invited Review Member, College of Applied Health Sciences Pilot Interdisciplinary Grant Review Committee (2016- Present).

Invited Member, National Handoff Research Task Force formed by US Department of Health & Human Services (2015).

Invited Member, University of Illinois WISEST (Women in Science and Engineering System Transformation) Team (2015-Present).

Member, University of Illinois System Research Steering Committee (2015-Present).

Member, New York Academy of Medicine Research Strategic Planning Committee (2012-2013).

Scientific Program Committee/Conference Chair

Member, American Medical Informatics Association Scientific Program Committee, 2016.

Co-Chair, Human Factors and Ergonomics Society (HFES), International Healthcare Symposium, Patient Safety Research and Initiatives Track, 2016.

Member, ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW) Scientific Program Committee, 2015.

Member, Human Factors and Ergonomics Society (HFES), International Healthcare Symposium, Scientific Program Committee, 2015.

Member, ACM SIGCHI Conference on Human Factors in Computing Systems (CHI), Workshop Jury Committee, 2012.

Awards Committee

Chair, AMIA People and Organizational Issues (POI) Diana Forsythe Award Committee, 2016.

Member, AMIA People and Organizational Issues (POI) Diana Forsythe Award Committee, 2015.

Faculty Search Committee

Search Committee Co-Chair, UIC Department of Biomedical and Health Information Sciences, Tenure-track or Tenured Faculty Hire (2016-Present).

PUBLICATIONS

Google Scholar: <https://scholar.google.com/citations?user=LKYwpLsAAAAJ&hl=en&oi=ao>

Manuscripts under Review/Revision

[J.] Blocker, R.C., **Abraham, J.**, Patterson, E., Perry, S.L., Beach, C., Wears, R.L., Fuller, D., Manser, T., Mount-Campbell, A., Hallbeck, S.M. (*Under Review*). Using Human Factors to Develop an Infrastructure for Handoffs to Improve Patient Safety.

Refereed Journal Articles

[J.19] Kannampallil, T.G., **Abraham, J.**, Solotskaya, A., Philip, S.G., Lambert, B.L., Schiff, G.D., Wright, A. & Galanter, W.L. (*In Press*). Learning from Errors: Analysis of Medication Order Voiding in CPOE Systems. *Journal of the American Medical Informatics Association (JAMIA)*.

[J.18] **Abraham, J.**, Kannampallil, T.G., Patel, B., Patel, V.L., Almoosa, K.F. (*In Press*). Moderating disproportionate time allocation during daily rounds using structured tools. *Journal of Medical Internet Research Human Factors (JMIRHF)*.

[J.17] **Abraham, J.**, Kannampallil, T.G., Srinivasan, V., Tagney, G., Galanter, W.L. & Cohen, T. (*In Press*). Measuring Content Overlap during Handoff Communication: A Mixed-Method Approach. *Journal of Biomedical Informatics*.

[J.16] Kannampallil, T.G., **Abraham, J.** & Patel, V.L. (*In Press*). Methodological Framework for Evaluating Clinical Processes: A Cognitive Informatics Perspective, *Journal of Biomedical Informatics (JBI)*.

[J.15] Zheng K, **Abraham J**, Novak LL, TL Reynolds, Gettinger A. A survey of the literature on unintended consequences associated with health information technology: 2014–2015. *Year Med Inform.* 2016;10(1):13–29.

[J.14] Dunn Lopez, K, Gephart, S, Raszewski, R, Sousa, V, Price, L & **Abraham, J.** (*In Press*). Integrative Review of Clinical Decision Support for Registered Nurses in Acute Care Settings. *Journal of the American Medical Informatics Association.* ocw084.

[J.13] **Abraham, J.**, Kannampallil, T.G. Caskey, R.N., Kitsiou, S. (2016). Emergency

Department-based Care Transitions for Pediatric Patients: A Systematic Review, *Pediatrics*. e20160969.

[J.12] **Abraham, J.**, Kannampallil, T., Brenner, C., Lopez, K. D., Almoosa, K. F., Patel, B., & Patel, V. L. (2016). Characterizing the structure and content of nurse handoffs: A Sequential Conversational Analysis approach. *Journal of Biomedical Informatics*, 59, 76-88.

[J.11] **Abraham, J.**, Kannampallil, T.G., Almoosa, K.F. (2015) Metrics for Evaluating the Quality of Handovers. Letter to the Editor. *JAMA Internal Medicine*, 175(4):654-655.

[J.10] **Abraham, J.**, Kannampallil, T.G., Almoosa, K.F., Patel, B., & Patel, V.L. (2014). Comparative Evaluation of the Content and Structure of Communication using Two Handoff Tools: Implications for Patient Safety. *Journal of Critical Care*, 29 (2), pp. 311.

[J.9] **Abraham, J.**, Kannampallil, T.G., & Patel, V.L. (2014). A Systematic Review of the Literature on Evaluation of Handoff Tools: Implications to Research and Practice. *Journal of the American Medical Informatics Association* 21 (1), pp. 154-162. **[** 2014 top 10 cited; 2015 top 4 cited paper in JAMIA and influential paper contributing to JAMIA's 2016 Impact Factor].**

[J.8] **Abraham, J.**, Kannampallil, T.G., & Patel, V.L. (2012). Bridging gaps in handoffs: a continuity of care based approach. *Journal of Biomedical Informatics*, 45(2), pp. 240-254.

[J.7] **Abraham, J.** & Reddy, M. (2010). Coordination Challenges in Patient Transfers: A Workflow Perspective, *International Journal of Medical Informatics*, 79 (2), pp. 112-122.

****[J.6] Reddy, M., Paul, S.A., Abraham, J., McNeese, M., DeFlicht, C., & Yen, J. (2009). Challenges to Effective Crises Management: Coordinating Emergency Medical Services and Emergency Department Teams, *International Journal of Medical Informatics*, 78(4), pp. 259-69. [**Diana Forsythe Award]**

[J.5] Lorence, D.P. & **Abraham, J.** (2008). A study of undue pain and surfing: using hierarchical criteria to assess website quality, *Health Informatics Journal*, 14(3), pp. 155-73

[J.4] Lorence, D.P. & **Abraham, J.** (2008). Examining the Role of Internet in SIDS Management and its Emergence as a Domain of Uncertainty, *International Journal of Healthcare Technology and Management*, 9 (3), pp. 303-323.

[J.3] Lorence, D.P. & **Abraham, J.** (2008). When Medicine Fails: Evaluating Website Quality for Interpretation of Uncertain Diagnoses, *International Journal of Healthcare Technology and Management*, 9 (1), pp. 19-38.

[J.2] Lorence, D.P. & **Abraham, J.** (2006). Comparative Analysis of Medical Web Search Using Generalized vs. Niche Technologies, *Journal of Medical Systems*, 30 (3), pp. 211 - 219.

[J.1] Lorence, D.P. & **Abraham, J.** (2006). Analysis of semantic search within the domains of uncertainty: using Keyword Effectiveness Indexing as an evaluation tool, *International*

Journal of Electronic Health, 2 (3), pp. 263 - 276.

Refereed Conference Publications

[C.11] **Abraham, J.** & Acharya, S. (2016). Investigating the Semantic Similarities across Physician and Nurse Handoffs, *International Symposium on Human Factors and Ergonomics in Health Care: Shaping the Future*, San Diego, CA.

[C.10] Caliendo, M. & **Abraham, J.** (2016). Use of Reflective Practice Training to improve Diagnostic Outcomes: An Integrative Review. *International Symposium of Human Factors and Ergonomics in Healthcare*, San Diego, CA.

[C.9] **Abraham, J.** & Kannampallil, T.G. (2014). Quantifying Physician Activities in Emergency Care: An Exploratory Study, *Annual Conference of the Human Factors and Ergonomics Society (HFES)*. Chicago, IL.

[C.8] **Abraham, J.**, Kannampallil, T.G., & Patel, V.L. (2014). Towards an Ontology for Interdisciplinary Handoff Communication in Intensive Care: Implications for Tool Resiliency and Patient Safety, *International Symposium on Human Factors and Ergonomics in Healthcare*, Chicago, IL.

[C.7] **Abraham, J.** & Reddy, M. (2012). Re-Coordination Activities: Exploring Articulation Work in Hospitals. *ACM Conference on Computer Supported Cooperative Work*, San Antonio, TX.

[C.6] **Abraham, J., Kannampallil, T., Patel, B., Almoosa, K.F., Patel, V. L. (2012). Ensuring Patient Safety in Care Transitions: An Empirical Evaluation of a Handoff Intervention Tool. *Proceedings of AMIA Annual Symposium 2012*, Chicago, IL.

****Distinguished Paper Award**

[C.5] **Abraham, J.**, Nguyen, V., Almoosa, K., Patel, B., Patel, V.L. (2011). Falling through the Cracks: Information Breakdowns in Critical Care Handoff Communication. *Proceedings of AMIA Annual Symposium 2011*, Washington, DC.

[C.4] **Abraham, J.** & Kannampallil, T. G. & Reddy, M. (2009). Peripheral Activities during EMR Use in Emergency Care: A Case Study, *Proceedings of AMIA Annual Symposium 2009*, San Francisco, CA.

[C.3] **Abraham, J.** & Reddy, M. (2008). Moving Patients Around: Coordination between Clinical and Non-Clinical Departments, *ACM Conference on Computer Supported Cooperative Work*, San Diego, CA.

[C.2] Paul, S.A., Reddy, M., **Abraham, J.** & DeFlitch, C.J. (2008). The Usefulness of Information and Communication Tools in Crisis Response. *Proceedings of AMIA Annual Symposium 2008*, Washington, DC.

[C.1] Zhu, S., **Abraham, J.**, Paul, S.A., Reddy, M., Yen, J., Pfaff, M. & DeFlitch, C. (2007). R-

CAST-MED: Applying Intelligent Agents to Support Emergency Medical Decision-Making Teams, *Proceedings of Artificial Intelligence (AI) in Medicine 2007*, pp. 24-33.

Panel Presentations

[PN.3.] **Abraham, J.**, Riesenberg, L.A., Patterson, E., Wears, R. (2016). Handoffs: The Good, the Bad, and the Ugly, *2016 International Symposium on Human Factors and Ergonomics in Health Care: Shaping the Future*, San Diego, CA.

[PN.2.] **Abraham, J.**, Kaufman, D., Patel, B., Mamykina, L., Franklin, A. (2013). Imposing Order in Communication. Cognitive Complexity and Errors in Critical Care, *James S. McDonnell Foundation Annual Symposium*, Sedona, AZ.

[PN.1] **Abraham, J.**, Kaufman, D., Reddy, M., Koppel, R., Staggers, N. Dimensions of Handoff Communication and Documentation: Implications for Patient Safety. *Proceedings of AMIA Annual Symposium 2011*, Washington, DC.

Refereed Conference Podium Abstracts, Workshops & Posters

[A.4] O'Rourke, J., **Abraham, J.**, Dunn Lopez, K., Riesenberg, L.A. (*In Press*). Achieving Consensus on Core Nursing Handoff Components: A National Delphi Study. Midwest Nursing Research Society (MNRS) 2017, Minneapolis, MN.

[A.3] Jacob, K., Burton, S., **Abraham, J.** (*in Press*). Evaluating the Impact of Gender on Resident Handoff Communication. 2017 International Symposium on Human Factors and Ergonomics in Health Care. New Orleans Louisiana.

[A.2] Gephart, S., **Abraham, J.**, Raszewski, R., Price, L. & Dunn Lopez, K. (2015). An Integrative Review of Nursing Clinical Decision Support Systems: Examining the Impact on Process, Usability and Patient Outcomes. *Proceedings of AMIA Annual Symposium 2015*, San Francisco, CA.

[A.1] **Abraham, J.**, Patel, B., Almoosa, K.F., Warner, M.T., Kannampallil, T.G., & Patel, V.L. (2011). Minimizing Communication Breakdowns: An Empirical Evaluation of a Handoff Intervention Tool, *Critical Care Medicine*, 39 (12), pp. 176.

[W.5] Dunn Lopez, K., Gephart, S., **Abraham, J.** (2016). Current state of nursing clinical decision support and future directions: an integrative literature review, *Designing Next Generation of Clinical Decision Support for Nursing from Hospital to Homecare: AMIA Nursing Informatics Group Pre-Symposium Workshop. Proceedings of AMIA Annual Symposium 2016*, Chicago, IL.

[W.4] **Abraham, J.** and Reddy, M. (2010). Meta-Coordination Activities: Maintaining Hospital Coordination. Workshop on CSCW Research in Healthcare: Past, Present, and Future. *ACM Conference on Computer Supported Cooperative Work (CSCW 2010)*. Savannah, GA. Feb. 7, 2010.

[W.3] **Abraham, J.** & Reddy, M. (2008). Negative Cross-level Interactions in Coordination

Practices: A Field Study of Patient Transfers in a Hospital, IFIP WG 9.1 Workshop on Changing Work, Changing Technology at ACM Computer Supported Cooperative Work (CSCW), San Diego, CA.

[W.2] Paul, S.A., Reddy, M. & **Abraham, J.** (2007). Collaborative Sensemaking in Emergency Crisis Response: How do ICTs help? *Proceedings of ACM GROUP 2007*, Sanibel Island, FL.

[W.1] **Abraham, J.** & Reddy, M. (2007). Quality of Healthcare Websites: A Comparison of a General-Purpose vs. Domain-Specific Search Engine, *Proceedings of AMIA 2007*, Chicago, IL.

[P.18] Mushtaq, I., Ihianle, I., **Abraham, J.** (in Press). Understanding the Nature of Questions in Interunit Handoff Communication. *2017 International Symposium on Human Factors and Ergonomics in Health Care*. New Orleans Louisiana.

[P.17] Dunn Lopez, K., **Abraham, J.** (in Press). Consequences and Opportunities for Redesign Associated with Communication Technologies for Nurse-Physician Communication. *2017 International Symposium on Human Factors and Ergonomics in Health Care*. New Orleans Louisiana.

[P.16] Kartje, R., **Abraham, J.**, Gerber, B., Dieter, M., Kitsiou, S. (2016). Effects of Mobile Health Interventions on Patients with Diabetes: A Systematic Review. *College of Applied Health Sciences Research Day*.

[P.15] Mushtaq, I., Ihianle, I., **Abraham, J.** (2016). Understanding the Nature of Questions in Interunit Handoff Communication. *College of Applied Health Sciences Research Day*.

[P.14] Caliendo, M. & **Abraham, J.** (2016). Use of Reflective Practice Training to Improve Diagnostic Accuracy: An Integrative Review. *Central Association of Obstetricians and Gynecologist 83rd Annual Meeting*, Las Vegas Nevada.

[P.13] Srinivasan, V., Kannampallil, T.G., Cohen, T., **Abraham, J.** (2016). Analyzing Similarities in Handoff Communication Content between Residents and Nurses, *Proceedings of AMIA 2016*, Chicago, IL.

[P.12] Rad, B., Kitsiou, S., Kannampallil, T., **Abraham, J.** Emergency Department Care Transition Interventions for Pediatrics. Campbell University 6th Annual Interprofessional Health Sciences Research Symposium, April 2016.

[P.11] **Abraham, J.**, Kannampallil, T.G., Patel, V.L. (2016). Moderating Disproportionate Time Allocation during Daily Rounds: Role of Structured Tools, *2016 International Symposium on Human Factors and Ergonomics in Health Care: Shaping the Future*, April 13-16, 2016, San Diego, CA.

[P.10] Acharya, S., Kannampallil, T.G., **Abraham, J.** (2016). Investigating the Semantic Similarities across Physician and Nurse Handoffs, *2016 International Symposium on Human Factors and Ergonomics in Health Care: Shaping the Future*, April 13-16, 2016, San Diego, CA.

[P.9] Jacob, K. Burton, S., **Abraham, J.** (2015). Examining the Impact of Participant Gender on Handoff Communication. *College of Applied Health Sciences Research Day*.

[P.8] Acharya, S., Kannampallil, T.G., **Abraham, J.** (2015). Investigating the Semantic Similarities across Physician and Nurse Handoffs. *College of Applied Health Sciences Research Day*.

[P.7] **Abraham, J.** (2014). Moderating Disproportionate Time Allocation during Daily Rounds: Role of Structured Tools. *College of Applied Health Sciences Research Day, Chicago IL*.

[P.6] **Abraham, J.**, Nguyen, V., Patel, V.L. (2011). Analyzing Information Needs in Critical Care Handoffs. *Proceedings of AMIA Annual Symposium 2011, Washington, DC*.

[P.5] **Abraham, J.**, Nguyen, V., Patel, V.L. (2011). Analyzing Information Needs in Critical Care Handoffs. *NRSA Conference 2011, Seattle*.

[P.4] **Abraham, J.**, Nguyen, V., Almoosa, K.F., Patel, B. & Patel, V.L. (2010). Communication Complexity in Critical Care, Keck Annual Conference, October 15, 2010, Houston, TX.

[P.3] **Abraham, J.**, Almoosa, K., Patel, B. & Patel, V. (2010). Effect of Coordination in Critical Care Round Communication, *Proceedings of AMIA 2010, Washington, DC*.

[P.2] **Abraham, J.**, Almoosa, K., Patel, B. & Patel, V. (2010). Role of Coordination in Critical Care Round Communication, *NRSA Conference 2010, Boston, MA*.

[P.1] Zhu, S., **Abraham, J.**, Paul, S.A., Reddy, M., Yen, J., Pfaff, M., & DeFlitch, C.J. (2007). R-CAST-MED: Applying Intelligent Agents to Support Emergency Medical Decision Making Teams. *Poster at the Second North East Student Colloquium on Artificial Intelligence (NESCAI 2007), Ithaca, NY*.

Book Chapters

[BC.4] Kannampallil, T.G. & **Abraham, J.** (2015). Evaluation of Health Information Technology: Methods, Frameworks and Challenges, In Patel, V.L., Kannampallil, T.G. & Kaufman, D. (Eds), *Cognitive Informatics in Health and Biomedicine: Human Computer Interaction*, Springer: London, UK.

[BC.3] **Abraham, J.** & Almoosa, K. (2014) Falling through the Cracks: Investigation of Care Continuity in Critical Care Handoffs, In Patel, V.L., Kaufman, D. & Cohen, T. (Eds), *Cognitive Informatics: Case Studies on Critical Care, Complexity and Errors*, Springer. [Adapted from [J.8]].

[BC.2] **Abraham, J.**, Kannampallil, T.G., & Patel, B. (2014). Bridging Gaps in Handoff Communication: A Comparative Evaluation of Information Organization Tools, In Patel, V.L., Kaufman, D. & Cohen, T. (Eds), *Cognitive Informatics: Case Studies on Critical Care, Complexity and Errors*, Springer [Adapted from [C.6]].

[BC.1] Kaufman, D.R., **Abraham, J.**, & Mamykina, L. (2014). Communication and Complexity: Negotiating Transitions in Critical Care. In Patel, V.L., Kaufman, D. & Cohen, T. (Eds), *Cognitive Informatics: Case Studies on Critical Care, Complexity and Errors*, Springer.

Invited Talks

[IT.11] Ins and Outs of Handoff Practices in US Hospitals. Delegation of China: Ministry of Health. *UIC College of Business Administration*, Chicago, IL. October 12, 2015.

[IT.10] Towards an Ontology for Interdisciplinary Handoff Communication in Intensive Care. *Institute of Health Research and Policy (IHRP)*, University of Illinois at Chicago, IL. April 27, 2015.

[IT.9] Fundamentals of Handoffs. Handoff Training to UIC Medical Students. *College of Medicine*, University of Illinois at Chicago, IL. October 29, 2014.

[IT.8] Care Transitions between Emergency and Family Medicine Settings . *Department of Family Medicine*, University of Illinois at Chicago, IL. September 24, 2014.

[IT.7] Communication Complexity and Errors. *VA-Hines Center for Innovation Talks*. Chicago, IL. May 13, 2014.

[IT.6] Examining the Ins and Outs of Critical Care Handoffs: Implications for Patient Safety and Care Continuity, *College of Medicine*, University of Illinois, Chicago. April 29, 2013.

[IT.5] Examining the Ins and Outs of Critical Care Handoffs: Implications for Patient Safety and Care Continuity, *University of Texas Health Center*, Houston, Texas. March 16, 2013.

[IT.4] Reducing Communication Complexity and Errors in Critical Care: Design and Evaluation of a Handoff Intervention Tool, *James S. McDonnell Annual Symposium*, New York, NY. May 14, 2012.

[IT.3] Lost in Transit: Handoff Communication Complexity in Critical Care, *James S. McDonnell Annual Symposium*, Houston, TX. October 25, 2011.

[IT.2] Handoff Communication Complexity in Critical Care. *Bren School of Information and Computer Sciences*, University of California, Irvine, Fall, 2010.

[IT.1] Effect of Coordination on Patient Transfer Workflow. *University of Texas Health Science Center*, Houston, TX, Fall, 2009.

Guest Lectures

[GL.2] **Abraham, J.** (2016). Experiences in Grant Submissions. *HIM Class on Health Information Research*, University of Illinois at Chicago.

[GL.1] **Abraham, J.** (2016). Social and Organizational Issues in Health Informatics. *MBA*

Class on Healthcare Informatics, University of Illinois at Chicago.

Other Presentations

[O.4] **Abraham, J.** (2012). Reducing Communication Complexity and Errors in Critical Care: Design and Evaluation of a Handoff Intervention Tool. Cognitive Complexity and Errors in Critical Care. James S. McDonnell Foundation, New York, NY.

[O.3] **Abraham, J.** (2010). Communication Complexity in Critical Care. Cognitive Complexity and Errors in Critical Care. James S. McDonnell Foundation, Houston, TX.

[O.2] **Abraham, J.** (2007). Streamlining the Patient Care Process: Achieving Inter-Departmental Coordination. *Connections 2007 Doctoral Consortium*, Philadelphia, PA.

[O.1] Kannampallil, T. G. & **Abraham, J.** (2005). Interdisciplinarity in Information Science (*Track: Grand challenges in our field*) I-Conference 2005, Penn State University, University Park, PA.

Book Reviews

[B.1] Reddy, M. & **Abraham, J.** (2007). Handbook of Evaluation Methods for Health Informatics, Jytte Brender (2005). *Information Processing and Management*, 43 (1), pp 287-288.

TEACHING

Summer 2016

Course Instructor, BHIS 595 Seminar in *Biomedical and Health Information Sciences*.

Summer, 2016

Course Co-Instructor, UIC, 2016 AMIA 10*10 at UIC, *Human Factors, Communication and Handoffs in Healthcare*.

Spring 2016

Course Co-Instructor, HSIP_443-0_SEC20 Biomedical Informatics Methods III. *Cognition and Reasoning in Medicine and Biomedical Informatics*, Northwestern University.

Spring 2016

Course Instructor, BHIS 500 *Strategic Inquiry in BHIS*.

Summer, 2015

Course Instructor, BHIS 595 Seminar in *Biomedical and Health Information Sciences*.

Spring 2015

Course Co-Instructor, HSIP_443-0_SEC20 Biomedical Informatics Methods III. "*Cognition and Reasoning in Medicine and Biomedical Informatics*", Northwestern

University.

Spring 2015 **Course Instructor**, BHIS 500 *Strategic Inquiry in BHIS*.

Summer 2014 **Course Instructor**, BHIS 595 *Seminar in Biomedical and Health Information Sciences*.

Spring 2014 **Course Co-Instructor**, UIC, 2013 AMIA 10*10 at UIC, *Human Factors in Healthcare*.

Spring 2014 **Course Co-Instructor**, HSIP_443-0_SEC20 *Biomedical Informatics Methods III. Cognition and Reasoning in Medicine and Biomedical Informatics*, Northwestern University.

Fall 2008, Spring 2009 **Teaching Assistant**, College of IST, Penn State University, *Decision Theory*.

Fall & Spring 2003, 2005, 2006 **Teaching Assistant**, College of IST, Penn State University, *Information, People and Technology*.

SCIENTIFIC REVIEW ACTIVITIES

Grant Review

Member, Interdisciplinary Pilot Grant, College of Applied Health Sciences, Scientific Review Panel, 2016, Chicago, IL.

Member, National Science Foundation, Directorate for Computer and Information Science and Engineering, Scientific Review Panel, 2016, Washington, DC.

Member, University of Illinois at Chicago Chancellor's Graduate Research Fellowship Program, Faculty Review Panel, ("Chancellor's Award"), 2014.

Journal Review

Ad Hoc Reviewer for National and International Journals: Journal of American Medical Informatics Association (2012-2014), Health Care Management Review (2014-2015), Journal of Pediatric Intensive Care (2013-2015), Journal of Critical Care (2013-2015), BioMedical Central (BMC) Medical Informatics and Decision Making (2014-2015), International Journal of Medical Informatics (IJMI) (2010-2013), Journal of Biomedical Informatics (JBI) (2011- 2013, 2016), BMJ Quality and Safety (2012-2014).

Ad Hoc Reviewer for National and International Conferences: AMIA (2010-current); Association for Information Sciences and Technology (ASIS&T) (2011); ACM CHI Conference on Human Factors in Computing Systems (2011-Current), ACM Conference on Computer Supported Cooperative Work (2011-Current); International Conference on Pervasive Computing Technologies for Healthcare (2012-2013)

OTHER PROFESSIONAL ACTIVITIES

Session Chair, Scientific Presentation Sessions, AMIA (2013-2016).

Member, University of Illinois Health, Ethics Committee Member (2013-2015).

Member, University of Illinois Health Data Analytics and Visualization Committee (2016-Present).

Member, PhD in BHIS Informatics Development and Admissions Committee, Department of Biomedical and Health Information Sciences (August 2013 - Present).

Member, Faculty Hiring Decision Committee, Biomedical and Health Information Sciences, 2014.

Symposium Coordinator, James S. McDonnell Foundation (JSMF) Symposium on Cognitive Complexity and Error in Critical Care, 2012-2014.

Chair, Logistics Committee, College of Information Sciences and Technology Symposium, 2007.