Curriculum Vitae

CYNTHIA S. GADD, PhD, MBA, MS, FACMI

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EDUCATION:

College

 North Carolina State University, Raleigh, NC: BS, Summa Cum Laude Textile Engineering, 1972-1976

Professional or Graduate

- Winthrop University, Rock Hill, SC: MBA, 1977-1979
- University of Pittsburgh, Katz Graduate School of Business, Pittsburgh, PA: PhD, 1982-1995
 Information Systems and Cognitive Science (Advisor: Harry E. Pople)
- Duke University, School of Engineering, Durham, NC: MS, 1995-1998
 Medical Informatics (Advisor: David F. Lobach)

Research Fellowship

Duke University, Durham, NC: NLM Medical Informatics Fellowship, 1995-1997

ACADEMIC APPOINTMENTS:

- Instructor and Assistant to the Dean, School of Business Administration, Winthrop University, 1980–1982
- Assistant Professor, School of Business Administration, College of William and Mary, 1989-1995
- Assistant Professor, Section of Biomedical Informatics, Department of Medicine, University of Pittsburgh, 1997-2005
- Assistant Professor, Secondary Appointment, Intelligent Systems Program, Department of Computer Science, University of Pittsburgh, 1997-2005
- Associate Professor, Department of Biomedical Informatics, Vanderbilt University, 2005-2011
- Director of Educational Programs, Department of Biomedical Informatics, Vanderbilt University, 2005-2012
- Professor, Department of Biomedical Informatics, Vanderbilt University, 2011-present
- Faculty Head of House, East House, The Martha Rivers Ingram Commons, Vanderbilt University, 2012-2016
- Vice-Chair for Educational Affairs, Department of Biomedical Informatics, Vanderbilt University, 2012-present
- Executive Director, Advanced Health Informatics Certification, AMIA, August 2016-June 2019

- Scholar in Residence, Seaver College of Science and Engineering, Loyola Marymount University, January-May 2017 (on scholarly leave of absence from Vanderbilt University)
- Adjunct Professor, School of Nursing and Health Professions, University of San Francisco, anticipated July-November 2017 (on scholarly leave of absence from Vanderbilt University)

PROFESSIONAL ORGANIZATIONS:

Association of Computing Machinery, 1982-1989 Cognitive Science Society, 1985-2004 American Association of Artificial Intelligence, 1985-2004 American Medical Informatics Association, 1995-present American College of Medical Informatics, 2008-present

PROFESSIONAL ACTIVITIES INTRAMURAL:

- Management Information Technology Curriculum Director, College of William and Mary, 1990-1995
- Co-Director, Biomedical Informatics Training Program, University of Pittsburgh, 1997-2003
- Member of the IAIMS Operations Committee, Center for Biomedical Informatics, University of Pittsburgh, 1997-2004
- Chair, IAIMS Evaluation Group, Center for Biomedical Informatics, University of Pittsburgh, 1998-2004
- Member, Information Security Committee, Information Services Division, UPMC Health System, 1998-2004
- Director, Medical Informatics Training for Africa, University of Pittsburgh, 1999-2005
- Director, Laboratory for Implementation and Evaluation, University of Pittsburgh, 2000-2005
- Chair, Curriculum Committee, Biomedical Informatics Training Program, 2001-2005
- Acting-Director, Biomedical Informatics Training Program, University of Pittsburgh, 2003-2005
- Member, Graduate Council, School of Medicine, University of Pittsburgh, 2003-2005
- Chair, Curriculum Committee, Biomedical Informatics MS-PhD Degree Program, Vanderbilt University, 2005-2015
- Chair, Admissions Committee, Biomedical Informatics MS-PhD Degree Program, Vanderbilt University, 2005-present
- Ex officio Member, Academic Program Committee, Biomedical Informatics MS-PhD Degree Program, Vanderbilt University, 2005-present
- Director of Graduate Studies, Biomedical Informatics MS-PhD Degree Program, Vanderbilt University, 2006-2020
- Delegate, Graduate Faculty Delegate Assembly, Vanderbilt University, 2006-2008
- Emphasis Program Area Head for Biomedical Informatics, Vanderbilt University, 2007-2013
- Member, Informatics Strategic Planning Educational Group, Vanderbilt University, 2007-2008
- Member, IGP Internal Review Subcommittee, Vanderbilt University, 2008-2009
- Member, Graduate Honors Fellowship Selection Committee, Vanderbilt University, 2008-2009
- Member, Vanderbilt Clinical & Translational Research Scholars (VCTRS) Program Application Review Committee, Vanderbilt University, 2009-present
- Member, Vanderbilt School of Medicine Promotions Committee for Class of 2013, Vanderbilt University, 2009-2013
- Member, Vanderbilt School of Medicine Quarterly Basic Science Education Group (QBSEG), Vanderbilt University, 2009-present
- Member, Vanderbilt School of Medicine Biomedical Research Education and Training (BRET) Steering Committee, Vanderbilt University, 2010-2012
- Chair, Liaison Committee on Medical Education (LCME) Subcommittee on Educational Resources – Library Services and Information Resources, 2012.

- Member, Vanderbilt School of Medicine MSTP Faculty Advisory Committee, Vanderbilt University, 2012-2016
- Lead, Curriculum 2.0 Informatics Thread Team, Department of Biomedical Informatics, Vanderbilt University, 2012-2014
- Member, Vanderbilt School of Medicine Medical Education Journal Club Advisory Committee, Vanderbilt University, 2012-2013
- Informatics Area Co-Director, School of Medicine Medical Student Research, Vanderbilt University, 2014-2016
- Director, MS in Applied Clinical Informatics, Department of Biomedical Informatics, Vanderbilt University, 2014-2015
- Member, Clinical Informatics Fellowship Faculty, Department of Biomedical Informatics, Vanderbilt University, 2014-present
- Member, Co-Curricular Engagement External to the College Halls (CEECH) Working Group, Vanderbilt University, December 2014 - April 2015
- Ex officio Member, Curriculum Committee, Biomedical Informatics Degree Program, Vanderbilt University, April 2015 - present
- Member, Vanderbilt School of Medicine MSTP Admissions Committee, Vanderbilt University, 2018 - present
- Portfolio Coach, Undergraduate Medical Education, Vanderbilt School of Medicine, August 2018 - present
- Faculty Advisor, Clinical Informatics Interest Group, School of Medicine UME, August 2019 present

PROFESSIONAL ACTIVITIES EXTRAMURAL:

Study Sections:

- Member, Special Emphasis Panel, International Training for Global Health (RFA TW-03-008), National Library of Medicine and Fogarty International Center, National Institutes of Health, February 2-3, 2004
- Member, Special Emphasis Panel, Research on Emergency Medical Services for Children (PAR 08-261). NIH and AHRQ. December 10, 2009 and December 7, 2010
- Chair, ONC Competency Examination Applications Review Committee, February 16. 2010
- Member, Special Emphasis Panel, Predoctoral Training in Biomedical Big Data Science - T32 and T15 (RFA-HG-14-004, -005, -006), NIH, October 26, 2014.
- Member, Special Emphasis Panel, Predoctoral Training in Advanced Data Analytics for Behavioral and Social Science - T32 (RFA-OD-19-011), NIH, October 22, 2019.

Peer Review:

- American Medical Informatics Association Annual Symposium, 1998-present
- Journal of the American Medical informatics Association, 2005-present
- International Journal of Medical informatics, 2007-2015

Committees and Panels:

- Panel Organizer. The Study of Situated Clinical Practice: Multiple Approaches to Qualitative Research in Informatics. The 1996 Annual Fall Symposium of the American Medical Informatics Association, Washington, D.C., October 28-30, 1996
- Panelist, Teaching People and Organizational Issues in Medical Informatics Curricula. The 1999 Annual Fall Symposium of the American Medical Informatics Association, Washington, D.C., November 6-10, 1999 (Invited)
- Panelist, Using Decision Support Systems to Support Evidence-Based Practice Change. 2000 American Medical Informatics Association Spring Congress on Information Technologies for Quality Improvement in Health Care. Boston, MA, May 23-25, 2000 (Invited)

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- Workshop Organizer, Biomedical Collaboratories Workshop, National Center for Research Resources (NCRR), National Institutes of Health, Pittsburgh Supercomputing Center, Pittsburgh, Pennsylvania, October 27-29, 2000
- Diana Forsythe Award Committee, American Medical Informatics Association, People and Organizational Issues Working Group, Chair 2000-2001, 2008, 2009 and Member 2002-2004, 2006, 2010
- Co-Chair, People and Organizational Issues Working Group, American Medical Informatics Association, 2000-2002
- Member, AMIA 2003 Symposium Scientific Program Committee
- Member, 2004 International Technology in Healthcare Conference Scientific Program Committee
- Member, AMIA 2005 Symposium Scientific Program Committee, Applications Track
- Panelist, Interdisciplinary Research and Practice: Informatics as a Case Example.
 2006 Association for Library and Information Science Education Conference. San Antonio, TX, January 16-19, 2006 (Invited)
- Chair, AMIA 10x10 Steering Committee, 2006-2007
- Member, AMIA Academic Forum, 2006-present
- Member, AMIA 2006 Symposium Distinguished Poster Award Selection Committee
- Member, AMIA Education Committee, 2006-2012
- Member, AMIA 2008 Symposium Scientific Program Committee
- Member, AMIA Global Partnership Program Steering Committee, 2009-2010
- Track Co-Chair, 2010 AMIA NOW! Scientific Program Committee
- Member, Tokai University Institute of Innovative Science and Technology Faculty Selection Committee, 2010-2012
- Member, Cane Ridge High School (MNPS) Academy of Health Management Advisory Board, December 2010-July 2011
- Chair-Elect, AMIA Academic Forum, effective January 1, 2012-December 31, 2012
- Chair, AMIA Academic Forum Advanced Interprofessional Informatics Certification Task Force, July 2011-present
- Chair, Cane Ridge High School (MNPS) Academy of Health Management Advisory Board, August 2011-2013
- Member, Expert Advisory Panel for "Efficiency Measures Associated with the Use of Electronic Health Records," RAND Health (an ONC initiative), August 2011
- Member, AMIA Board of Directors, January 2012-2017
- Member, American College of Medical Informatics Executive Committee, 2012-2013
- Chair, AMIA Academic Forum, effective January 1, 2013-December 31, 2013
- Program Chair, AMIA Academic Forum Annual Conference, Nashville, TN, May 2013
- Past Chair, AMIA Academic Forum, effective January 1, 2014-December 31, 2014
- Member, External Review Panel, Computational Bioscience Program, University of Colorado-Denver, Anschutz Medical Campus, March 2014
- Member, External Advisory Board, Biomedical Informatics Program, Regenstrief Institute, May 2014
- Member, External Review Panel, Department of Biomedical Informatics, University of Utah, January-February 2015
- Chair, AMIA Advanced Interprofessional Informatics Certification (AIIC) Work Group, 2015-2016
- Panelist, Advanced Interprofessional Informatics Certification (AIIC) Update, AMIA Academic Forum Annual Conference, Albuquerque, NM, April 2015 (Invited)
- Member, Pittsburgh Biomedical Informatics Training Program External Advisory Board, 2016-present
- Member, AMIA Clinical Informatics Subspecialty Health Informatics Practice Analysis Executive Committee, March 2018-2019
- Chair, AMIA Health Informatics Practice Analysis Oversight Panel, March 2018-2019

 Member, Department of Biomedical Informatics and Medical Education Review Committee, University of Washington, May 2018-October 2019

Research Consulting:

- RAND Health, Developing Standards for Electronic Prescribing Systems, 2001-2002
- RAND Health, Electronic Health Records, 2001-2002
- NIDCR-funded Dental Research Collaboratory, University of Pittsburgh School of Dental Medicine, 2002-2005
- AMIA, ONC Curriculum Review Content Expert, July 2011
- Executive Director, Advanced Health Informatics Certification, AMIA, August 2016-June 2019

HONORS AND AWARDS:

- 1976 Graduated Suma Cum Laude, North Carolina State University, Raleigh, North Carolina
- American Medical Informatics Association Leadership Award, 2007
- Fellow of the American College of Medical Informatics, 2008
- Vanderbilt School of Medicine Academy for Excellence in Teaching, 2010
- American Medical Informatics Association Leadership Award, 2013

TEACHING ACTIVITIES:

Courses

- Introduction to Business, School of Business Administration, Winthrop University, Instructor, 1980-1982
- Labor Law, School of Business Administration, Winthrop University, Instructor, 1981
- Introduction to Management Information Systems, Graduate School of Business Administration, College of William and Mary, Instructor, 1989-1993
- Database Management Systems, School of Business Administration, College of William and Mary, Instructor, 1991-1992
- Introduction to Management Information Systems, School of Business Administration, College of William and Mary, Instructor, 1993-1995
- Introduction to Biomedical Informatics, School of Medicine, University of Pittsburgh, Instructor, 1997-2005
- Advanced Seminar on Information Technology and Health Care Organizations, School of Medicine, University of Pittsburgh, Instructor, 1998-2000
- Information Technology and Health Care Organizations School of Medicine, University of Pittsburgh, Co-Instructor, 2002-2005
- Evaluation Methods for Biomedical Informatics, Graduate School, Vanderbilt University, Co-Director, 2007-2016 (developed new course in 2007)
- Methodological Foundations of Biomedical Informatics, Qualitative Methods Module, Graduate School, Vanderbilt University, Co-Director, 2007-2016 (developed new course in 2007)

Other Lectures

- Emergent IAIMS Focal Activity on Practice-Based Clinical Epidemiology.
 Presentation to the Integrated Advanced Information Management Systems (IAIMS)
 Site Review Committee, University of Pittsburgh and UPMC Health System,
 Pittsburgh, PA, October 8, 1997
- Identification of User Interface Attributes to Enhance Utilization and Acceptance of Clinical Decision Support Systems. Presentation to the Intelligent Systems Program Research Seminar, University of Pittsburgh, Pittsburgh, PA. October 20, 1997

- Identification of Design Features to Enhance Utilization and Acceptance of Systems for Internet-Based Decision Support. Presentation to the Center for Biomedical Informatics, Medical Informatics Colloquium, Pittsburgh, PA. June 25, 1998
- Clinical Decision Support Systems. Presentation to UPMC St. Margaret Family Practice Residency Program Seminar Series, Pittsburgh, PA. August 10, 1998
- The Pittsburgh IAIMS Initiative: Integrated Advanced Information Management Systems. Presentation to the Information Services Division, UPMC Health Systems, Pittsburgh, PA. May 18, 2000
- Effects of an EMR on Patient Care Clinicians' and Patients' Attitudes in a Pilot Implementation. Presentation to the Center for Biomedical Informatics, Medical Informatics Colloquium, Pittsburgh, PA. October 27, 2000
- Assessing Technology and Adoption Dichotomy Between Physicians' and Patients'
 Attitudes Regarding EMR Use During Outpatient Encounters. Presentation to the
 Center for Biomedical Informatics, Medical Informatics Colloquium, Pittsburgh, PA.
 November 16, 2000
- Evaluation of the Electronic Health Record and IAIMS. Pittsburgh 2002 Integrated Advanced Information Management Systems (IAIMS) Retreat, Pittsburgh, PA, April 22, 2002
- Dichotomy Between Physicians' and Patients' Attitudes Regarding EMR Use During Outpatient Encounters. Health Information Management course, HSR 2438, Research Methods and Clinical Data Analysis, University of Pittsburgh, Pittsburgh, PA. May 21, 2002
- Observation and Interview Methods. Biomedical Informatics course, BIOINF 2013, Clinical Environments in Biomedical Informatics, University of Pittsburgh, PA. October 1, 2002
- Evaluating Technology Applications in Medical Education. Clinical Education course, Innovative Teaching Strategies: Distance Learning, Web-Based Teaching, and Simulation, University of Pittsburgh, Pittsburgh, PA. March 14, 2003
- Distributed Cognition. Biomedical Informatics course, BIOINF 2111, Cognitive Studies for Health Informatics, University of Pittsburgh, Pittsburgh, PA. December 2, 2003
- Evaluating Technology Applications in Medical Education. Clinical Education course, Innovative Teaching Strategies: Distance Learning, Web-Based Teaching, and Simulation, University of Pittsburgh, Pittsburgh, PA. March 26, 2004
- Evaluating Clinical Informatics Systems. Presentation to the Center for Biomedical Informatics, Biomedical Informatics Distinguished Lecture Series, Pittsburgh, PA. October 15, 2004
- Organizational Issues in Biomedical Informatics. Nursing Informatics course, NURSP 2075, Introduction to Nursing Informatics, University of Pittsburgh, Pittsburgh, PA. October 25, 2004
- Distributed Cognition. Biomedical Informatics course, BIOINF 2111, Cognitive Studies for Health Informatics, University of Pittsburgh, Pittsburgh, PA. November 30, 2004
- Evaluation Methods for Biomedical Informatics. Biomedical Informatics course; BMIF 300, Foundations of Biomedical Informatics, Vanderbilt University, Nashville, TN. November 7, 2006
- Evaluation Methods for Biomedical Informatics. Biomedical Informatics course; BMIF 300, Foundations of Biomedical Informatics, Vanderbilt University, Nashville, TN. October 9, 2007

- Biomedical Informatics at Vanderbilt University. Cane Ridge High School (MNPS)
 Academy of Health Management Externship Program, Vanderbilt University,
 Nashville, TN. June 20-22, 2011
- Evaluation Methods for Biomedical Informatics. Veterans Affairs Health Informatics Course. September 2011
- Biomedical Informatics: Educational Opportunities and Career Pathways. DBMI Summer Seminar Series. June 2011-present

RESEARCH PROGRAM:

Extramural Research Training Support (Current):

Project Title: Vanderbilt Biomedical Informatics Training Program

Provides tuition and stipend support for eleven predoctoral (PhD), six postdoctoral (MS or

nondegree), and four short-term training fellowships in biomedical informatics.

Grant Number: T15 LM007450-16

Grant Source: National Library of Medicine, NIH

Principal Investigators: CYNTHIA S.GADD, PhD, Bradley Malin, PhD, and Jeremy Warner, MD, PhD

Project Period: 2017-2022

Project Title: Vanderbilt Training Program in Big Biomedical Data Science

Provides tuition and stipend support for 6 predoctoral training fellowships in a big data track in a

biomedical Informatics training program. Grant Number: 1 T32 LM012412-01

Grant Source: Big Data to Knowledge Program (administered by NLM) NIH

Principal Investigators: Bradley Malin, PhD, CYNTHIA S.GADD, PhD, Jeffrey Blume, PhD

Project Period: 2016-2021

Extramural Research Support (Past):

Project Title: Cognitive Science in Medicine Initiative: Communication of Medical Expertise

Grant Source: Josiah Macy, Jr. Foundation

Principal Investigators: David Evans, PhD, Vimla Patel, PhD

Role: Research Associate Project Period: 1985-1988

Project Title: Interactive Guideline-Based Decision Support Resource on the WWW

Grant Source: Agency for Health Care Policy and Research

Principal Investigator: David Lobach, MD

Role: Research Associate Project Period: 1996-1997

Project Title: Pittsburgh Biomedical Informatics Training Program

Grant Number: T15 LM/DE07059

Grant Source: National Library of Medicine and NIDR, NIH

Principal Investigator: Charles Friedman, PhD (1997-2003); CYNTHIA S.GADD, PhD (2003-2005)

Role: Co-Director (1997-2003) Project Period: 1997-2005

Project Title: Pittsburgh IAIMS Implementation: Advancing the Academic Mission with Information

Technology

Grant Number: G08-LM06625

Grant Source: National Library of Medicine, NIH Principal Investigator: Charles Friedman, PhD

Role: Co-Investigator Project Period: 1998-2004

Project Title: Survey/Evaluate VISN 4 IS Resources Grant Source: VA Pittsburgh Healthcare System

Role: Subcontract Principal Investigator - CYNTHIA S.GADD, PhD

Project Period: 1998

Project Title: Methods to Model Cause and Effects from Clinical Data

Grant Number: R01-LM06696

Grant Source: National Library of Medicine, NIH Principal Investigator: Gregory Cooper, MD, PhD

Role: Co-Investigator Project Period: 1998-2001

Project Title: Supercomputing for Biomedical Research: Biomedical Collaboratories for Software

Development

Grant Number: P41 RR06009

Grant Source: National Center for Research Resources, NIH

Principal Investigator: Ralph Roskies, PhD

Role: Subcontract Principal Investigator - CYNTHIA S.GADD, PhD

Project Period: 1998-2002

Project Title: Expanded Deployment, Enhancement, and Evaluation of the Image Engine Multimedia

Patient Record System

Grant Number: N01-LM-9-3522

Grant Source: National Library of Medicine, NIH

Principal Investigator: Henry Lowe, MD (1999-2001), CYNTHIA S. GADD, PhD (2001-2002)

Role: Co-Investigator (1999-2001)

Project Period: 1999-2002

Project Title: Medical Informatics Training for Africa

Grant Number: D43 TW01287

Grant Source: Fogarty International Center, NIH Principal Investigator: **CYNTHIA S.GADD, PhD**

Project Period: 1999-2005

Project Title: Integrated Medical Information Technology System Evaluation Grant Source: University of Pittsburgh Medical Center - U.S. Air Force Role: Subcontract Principal Investigator - **CYNTHIA S.GADD, PhD**

Project Period: 2003-2005

Project Title: Evaluation of an Adaptive, Scalable, and Secure I2-based Client Server Architecture for

Interactive Analysis and Visualization of Volumetric-Time Series Data

Grant Source: National Library of Medicine, NIH Principal Investigator: David Deerfield, PhD

Role: Subcontract Principal Investigator - CYNTHIA S.GADD, PhD

Project Period: 2003-2005

Project Title: Volunteer eHealth Initiative

Grant Number: AHRQ-04-0015

Grant Source: Agency for Healthcare Research and Quality (AHRQ), State of Tennessee

Principal Investigator: Mark Frisse, MD, MS, MBA

Role: Co-Investigator Project Period: 2004-2009

Project Title: STEPStools: Developing Web Services for Safe Pediatric Dosing

Grant Number: R18 HS 017216

Grant Source: Agency for Healthcare Research and Quality (AHRQ)

Principal Investigator: Kevin Johnson, MD, MS

Role: Co-Investigator Project Period: 2007-2010

Project Title: Vanderbilt Biomedical Informatics Training Program

Grant Number: T15 LM007450-10

Grant Source: National Library of Medicine, NIH Principal Investigator: **CYNTHIA S.GADD, PhD**

Project Period: 2007-2012 (ARRA Supplements 1 & 2, 2009-2011; Curriculum Supplement, 2010-

2011)

Project Title: A Framework Based Clinical Documentation Evaluation Method

Grant Number: 1 R01 LM009591-01A1

Grant Source: National Library of Medicine, NIH

Principal Investigator: S. Trent Rosenbloom, MD, MPH

Role: Co-Investigator Project Period: 2008-2011

Project Title: A Proposal for the Comprehensive Evaluation of the COM-P Biomedical Informatics

Theme

Contract Source: University of Arizona College of Medicine - Phoenix

Principal Investigator: Howard Silverman, MD

Role: Subcontract Principal Investigator - CYNTHIA S.GADD, PhD

Project Period: 2011-2012

Project Title: Disseminating Adapted Diabetes Evidence to Clinicians through a Patient Portal

Grant Number: 1 R18 HS019276-01

Grant Source: Agency for Healthcare Research and Quality (AHRQ)

Principal Investigator: S. Trent Rosenbloom, MD, MPH

Role: Co-Investigator Project Period: 2010-2013

Project Title: Integrated Fisk STEM 3 YR Undergrad-2Yr Masters in CS- Vanderbilt Informatics PhD

Grant Number: 1 P20 MD 008684-01

Grant Source: NIH/NIMHD

Principal Investigator: Lee Limbird, PhD

Role: Co-Investigator

Project Period: 2013 - 2014

Project Title: Vanderbilt University - National AIDS Research Institute (Pune, India) - National Institute

of Epidemiology (Chennai, India) Informatics Training Program

Grant Number: 1D43TW008440-05

Grant Source: Fogarty International Center, NIH Principal Investigator: **CYNTHIA S.GADD, PhD**

Project Period: 2009-2014

Project Title: Vanderbilt Biomedical Informatics Summer Research Experience Program

Grant Number: 1 R25 LM011174-05

Grant Source: National Library of Medicine, NIH Principal Investigator: **CYNTHIA S.GADD, PhD**

Project Period: 2011-2017 (incl. NCE)

Project Title: Vanderbilt Biomedical Informatics Training Program

Provides tuition and stipend support for nine predoctoral (PhD), six postdoctoral (MS or nondegree),

and four short-term training fellowships in biomedical informatics.

Grant Number: T15 LM007450-15

Grant Source: National Library of Medicine, NIH Principal Investigator: **CYNTHIA S.GADD, PhD**

Project Period: 2012-2017

Project Title: Vanderbilt Biomedical Informatics Training Program Administrative Supplement Provides funding to enhance data science educational materials and specific course offerings in Vanderbilt's T15 program and create educational materials for dissemination to the other T15 programs and the biomedical informatics community in general.

Grant Number: T15 LM007450-16 Supplement Grant Source: National Library of Medicine, NIH

Principal Investigators: CYNTHIA S.GADD, PhD, Bradley Malin, PhD, and Gretchen Jackson, MD,

PhD

Project Period: 2017-2018

Project Title: Vanderbilt Biomedical Informatics Training Program Administrative Supplement

Provides funding to enhance data science education pipeline development.

Grant Number: T15 LM007450-17 Supplement Grant Source: National Library of Medicine, NIH

Principal Investigators: CYNTHIA S.GADD, PhD, Bradley Malin, PhD, and Kim Unertl, PhD, PhD

Project Period: 2018-2019

Internally-supported Research (Past):

UPMC Health System Information Services Division

EMR Implementation and Evaluation 50% fte July 2002 - June 2005 20% fte Sept. 1997 - June 2002

Department of Family Medicine, University of Pittsburgh

IAIMS Focal Activity 25% fte Sept. 1997 - June 1999

PUBLICATIONS AND PRESENTATIONS:

Refereed Journal Articles*

- Gadd CS, Pople, Jr. HE. An interpretation synthesis model of medical teaching–rounds discourse: implications for expert system interaction. International Journal of Education Research, Special Issue on the Use of Computer Simulation as Research Tools. 1(1):81-102; 1988.
- 2. Lobach DF, **Gadd CS**, Hales JW. Structuring clinical practice guidelines in a relational database model for decision support on the Internet. Journal of the American Medical Informatics Association (AMIA Fall Symposium Supplement). 158-162; 1997
- 3. Hales JW, **Gadd CS**, and Lobach DF. Development and usage of a guideline entry wizard to convert text clinical practice guidelines to a relational format. Journal of the American Medical Informatics Association (AMIA Fall Symposium Supplement). 163-167; 1997.
- 4. Lobach DF, **Gadd CS**, Hales JW, Baskaran P. Siegfried: System for interactive electronic guidelines with feedback and resources for instruction and educational development. In B Cesnik et al., eds. Proceedings of MedInfo 98. Amsterdam: IOS Press. 827-831; 1998.
- 5. **Gadd CS**, Baskaran P, Lobach DF. Identification of design features to enhance utilization and acceptance of systems for internet-based decision support at the point of care. Journal of the American Medical Informatics Association (AMIA Fall Symposium Supplement). 91-95; 1998.
- 6. **Gadd CS**, Friedman CP, Douglas G, Miller DJ. Information resources assessment of a healthcare integrated delivery system. Journal of the American Medical Informatics Association (AMIA Fall Symposium Supplement). 525-529; 1999.
- 7. **Gadd CS**, Penrod LE. Dichotomy between physicians' and patients' attitudes regarding EMR use during outpatient encounters. Journal of the American Medical Informatics Association (AMIA Fall Symposium Supplement). 275-279; 2000.
- 8. Crowley RS, **Gadd CS**, Naus GJ, Becich MJ, Lowe HJ. Anatomical imaging defining the role of anatomic pathology images in the multimedia electronic medical record A preliminary report. Journal of the American Medical Informatics Association (AMIA Fall Symposium Supplement). 161-165; 2000.
- 9. **Gadd CS**, Penrod LE. Assessing Physician Attitudes Regarding Use of an outpatient EMR: A Longitudinal, Multi-Practice Study. Journal of the American Medical Informatics Association (AMIA 2001 Fall Symposium Supplement). 194-198; 2001.
- Manning B, Gadd CS. Introducing Handheld Computing into a Residency Program: Preliminary Results from Qualitative and Quantitative Inquiry. Journal of the American Medical Informatics Association (AMIA 2001 Fall Symposium Supplement). 428-432; 2001.
- 11. Mast CG, Caruso MA, **Gadd CS**, Lowe HJ. Evaluation of a Filmless Radiology Pilot A Preliminary Report. Journal of the American Medical Informatics Association (AMIA 2001 Fall Symposium Supplement). 443-447; 2001.
- 12. Penrod LE, **Gadd CS**. Attitudes of Academic-based and Community-based Physicians Regarding EMR Use During Outpatient Encounters. Journal of the American Medical Informatics Association (AMIA 2001 Fall Symposium Supplement). 528-532; 2001.

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Includes all refereed articles that are both published as complete peer-reviewed papers and indexed in Index Medicus.

- 13. McKibbon KA, **Gadd CS**. A quantitative analysis of qualitative studies in clinical journals for the 2000 publishing year. BMC Medical Informatics and Decision Making 2004, 4:11 http://www.biomedcentral.com/1472-6947/4/11.
- 14. Bartos CE, Nigam MK, Fridsma DB, **Gadd CS**. Predicting the Impact of a New Information System on Workflow Using a Discrete Event Simulation (MedInfo 2004 Building High Performance Healthcare Organizations). September, 2004.
- 15. Scotch M, Parmanto B, **Gadd CS**, and Sharma RK. Re: Exploring the role of GIS during community health assessment problem solving: experiences of public health professionals. International Journal of Health Geographics 2006, 5:39 (18 Sep 2006) https://www.ij-healthgeographics.com/content/5/1/39.
- 16. Chen Y, Chattopadhyay A, Bergen P; Gadd CS; Tannery N. The Online Bioinformatics Resources Collection at the University of Pittsburgh Health Sciences Library System--a one-stop gateway to online bioinformatics databases and software tools. Nucleic Acids Research 2006. DOI: 10.1093/nar/gkl781. http://nar.oxfordjournals.org/cgi/content/full/gkl781?ijkey=dFlpYUbKVAloMU1&keytype=ref.
- 17. Tannery NH, Wessel CB, Epstein BA, **Gadd CS**. Hospital nurses' use of knowledge-based information resources. Nursing Outlook 55(1): 15-19, January-February 2007. doi:10.1016/j.outlook.2006.04.006.
- 18. Johnson KB, **Gadd CS**. Playing smallball: Approaches to evaluating pilot health information exchange systems. Journal of Biomedical Informatics 40(6), Supplement 1: S21-S26, December 2007. PMID: 17931981.
- 19. Hoot NR, LeBlanc LJ, Jones I, Levin RS, Zhou C, **Gadd CS**, Aronsky D. Forecasting Emergency Department Crowding by Discrete Event Simulation. Ann Emerg Med, Dec 2007. Aug;52(2):116-25. PMID: 18387699.
- Lorenzi NM, Novak LL, Weiss JB, Gadd CS, Unertl KM. Crossing the Implementation Chasm: A Proposal for Bold Action. Journal of the American Medical Informatics Association 15(3) May/June 2008:290-6. PMID: 18308985.
- 21. Frisse ME, King JK, Rice WB, Tang L, Porter JP, Coffman TA, Assink M, Yang K, Wesley M, Holmes RL, **Gadd CS**, Johnson KB, Estrin VY. A regional health information exchange: architecture and implementation. AMIA Annu Symp Proc. 2008 Nov 6:212-6. PMID: 18999138.
- 22. Johnson KB, **Gadd CS**, Aronsky D, Yang K, Tang L, Estrin V, King JK, Frisse M. The MidSouth eHealth Alliance: use and impact in the first year. AMIA Annu Symp Proc. 2008 Nov 6:333-7. PMID: 18999184.
- 23. Wehbe FH, Brown SH, Massion PP, **Gadd CS**, Masys DR, Aliferis CF. A novel information retrieval model for high-throughput molecular medicine modalities. Cancer Inform. 2009 Feb 9;8:1-17. PMID: 19458790.
- 24. Hoot NR, Leblanc LJ, Jones I, Levin SR, Zhou C, **Gadd CS**, Aronsky D. Forecasting Emergency Department Crowding: A Prospective, Real-Time Evaluation. J Am Med Inform Assoc. 16(3):338-45. May-Jun 2009. PMID: 19261948.
- 25. Campion TR Jr, **Gadd CS**. Peers, Regulators, and Professions: The Influence of Organizations in Intensive Insulin Therapy Adoption. Q Manage Health Care 18(2): 115–119, April/June 2009. PMID: 19369854.
- 26. Hoot NR, Epstein SK, Allen TL, Jones SS, Baumlin KM, Chawla N, Lee AT, Pines JM, Klair AK, Gordon BD, Flottemesch TJ, LeBlanc LJ, Jones I, Levin SR, Zhou C, Gadd CS, Aronsky D. Forecasting Emergency Department Crowding: An External, Multi-Center Evaluation. Annals of Emergency Medicine 54(4): 514-522, October 2009. PMID: 19716629.
- 27. Novak L, Lorenzi NM, Gadd CS. Informing health IT design and implementation through analysis

- of organizational communication genres. AMIA Annu Symp Proc. 2009 Nov:987.
- 28. Campion TR Jr, Waitman LR, May AK, Ozdas A, Lorenzi NM, **Gadd CS**. Social, organizational, and contextual characteristics of clinical decision support systems for intensive insulin therapy: a literature review and case study. Int J Med Inform. 2010 Jan;79(1):31-43. PMID: 19815452.
- 29. Duda SN, Wehbe FH, **Gadd CS**. Desiderata for a computer-assisted audit tool for clinical data source verification audits. Proceedings of the 13th World Congress on Medical and Health Informatics Medinfo 2010. Cape Town, South Africa. September 2010. Stud Health Technol Inform. 2010;160(Pt 2):894-8. PMID: 20841814.
- 30. Campion TR Jr, May AK, Waitman LR, Ozdas A, **Gadd CS**. Effects of blood glucose transcription mismatches on a computer-based intensive insulin therapy protocol. Intensive Care Med. 2010 Sep;36(9):1566-70. PMID: 20352190.
- 31. McCoy AB, Waitman LR, **Gadd CS**, Danciu I, Smith JP, Lewis JB, Schildcrout JS, Peterson JF. "A Computerized Provider Order Entry Intervention for Medication Safety During Acute Kidney Injury: A Quality Improvement Report." American Journal of Kidney Diseases. 2010 Nov;56(5):832-41. PMID: 20709437.
- 32. Campion TR Jr, **Gadd CS**. Peers, regulators, and professions: the influence of organizations in health information technology adoption. AMIA Annu Symp Proc. 2010 Nov 11:86-90. PMID: 21346946.
- 33. Campion TR Jr, May AK, Waitman LR, Ozdas A, Lorenzi NM, **Gadd CS**. Characteristics and effects of nurse dosing over-rides on computer-based intensive insulin therapy protocol performance. J Am Med Inform Assoc. 2011;18:251-258. PMID: 21402737.
- 34. **Gadd CS**, Ho Y-X, Cala CM, Blakemore D, Chen Q, Frisse M, Johnson KB. User perspectives on the usability of a regional health information exchange. J Am Med Inform Assoc. 2011;18:711-716. PMID: 21622933. (Editor's Choice)
- 35. Campion TR Jr, Waitman LR, Lorenzi NM, May AK, **Gadd CS**. Barriers and Facilitators to the Use of Computer-based Intensive Insulin Therapy. Int J Med Inform. 2011 Dec;80(12):863-71. PMID: 22019280.
- 36. Novak LL, Anders SH, **Gadd CS**, Lorenzi NM. Mediation of Adoption and Use: A Key Strategy for Mitigating Unintended Consequences of Health IT Implementation. J Am Med Inform Assoc. 2012 Nov 1;19(6):1043-9. PMID: 22634157.
- 37. Novak LL, Anders SH, **Gadd CS**, Lorenzi NM. Mediating the intersections of organizational routines during the introduction of health IT systems. European Journal of Information Systems (2012) 21, 552-569. PMID: 24357898.
- 38. Frisse ME, Johnson KB, Nian H, Davison CL, **Gadd CS**, Unertl KM, Turri PA, Chen Q. The financial impact of health information exchange on emergency department care. J Am Med Inform Assoc. 2012 May-Jun;19(3):328-33. PMID: 22058169.
- 39. Unertl K, **Gadd CS**, Johnson KB, Lorenzi NM. Bridging Organizational Divides in Healthcare: An Ecological View of Health Information Exchange. JMIR Med Inform. 2013 Oct 29;1(1):e3. PMID: 25600166.
- 40. Ho YX, **Gadd CS**, Kelly Kohorst, Rosenbloom ST. A Qualitative Analysis Evaluating The Purposes And Practices of Clinical Documentation. Appl Clin Inform 2014 5 1: 153-168. PMID: 24734130.
- 41. Silverman H, Ho, Y-X, Kaib S, Ellis WD, Moffitt MP, Chen Q, Nian H, **Gadd CS**. A novel approach to supporting relationship-centered care through EHR ergonomic training in preclerkship medical education. Academic Medicine. 2014 Sep;89(9):1230-4. PMID: 24826851.
- 42. Duda SN, McGowan CC, **Gadd CS**. Perceived Reasons for High and Low Quality Observational HIV Research Data. Stud Health Technol Inform. 2015;216:994. PMID: 26262296.

- 43. **Gadd CS**, Williamson JJ, Steen EB, Fridsma DB. Creating Advanced Health Informatics Certification. J Am Med Inform Assoc. 2016; 23(4):848-850. PMID: 27358327.
- 44. **Gadd CS**, Williamson JJ, Steen EB et al. Eligibility Requirements for Advanced Health Informatics Certification. J Am Med Inform Assoc. 2016; 23(4):851-854. PMID: 27358328.
- 45. Valenta AL, Berner ES, Boren, SA, Deckard GJ, Eldredge C, Fridsma DB, **Gadd CS**, Gong Y, Johnson T, Jones J, Manos EL, Phillips KT, Roderer NK, Rosendale D, Turner AM, Tusch G, Williamson JJ, Johnson SB. AMIA Board White Paper: 2017 AMIA Core Competencies for Applied Health Informatics Education at the Master's Degree Level. J Am Med Inform Assoc. 2018 Dec 1;25(12):1657-1668. PMID: 30371862.
- 46. Unertl KM, Yang BY, Jenkins R, McCarn C, Rabb C, Johnson KB, **Gadd CS**. Next Generation Pathways into Biomedical Informatics: Lessons From Ten Years of the Vanderbilt Biomedical Informatics Summer Internship Program. JAMIA Open 2018; 1(2):178-187.
- 47. **Gadd CS**, Steen EB, Caro CM, Greenberg S, Williamson JJ, Fridsma DB. AMIA Position Paper: Domains, tasks, and knowledge for health informatics practice: results of a practice analysis. J Am Med Inform Assoc. 2020 Jun 1;27(6):845-852.

Books and Book Chapters

- 1. Evans DA, **Gadd CS**. Managing coherence and context in medical problem–solving discourse. In: Evans DA, Patel VL, Eds., Cognitive Science in Medicine. Cambridge, MA: MIT Press. 211-255; 1988.
- 2. **Gadd CS**, Pople, Jr. HE. Evidence from internal medicine teaching rounds of the multiple roles of diagnosis in the transmission and testing of medical expertise. In: Fredricksen N, Ed, Diagnostic Monitoring of Skill and Knowledge Acquisition. Hillsdale, NJ: Erlbaum. 89-112; 1990.
- 3. Einbinder L, Lorenzi NM, Ash JS, Einbinder J, **Gadd CS** (Editors). Transforming Health Care through Information: Case Studies (Health Informatics). Springer Verlag. 280 pp. 2009.

Abstracts, Posters, and Papers in Non-indexed Conference Proceedings

- 1. **Gadd CS**. A theory of the multiple roles of diagnosis in collaborative problem solving discourse. Proceedings of the 17th Annual Conference of the Cognitive Science Society, Pittsburgh, PA. Hillsdale, NJ: Erlbaum, pp. 352-357, 1995.
- 2. **Gadd CS**. Modeling the user in a mentor consultation discourse. Proceedings of the AAAI Spring Symposium on Knowledge-Based Human Computer Communication, Palo Alto, CA, March, 1990.
- 3. **Gadd CS**. Mentorship What lessons does consultation discourse provide for professional instruction? Proceedings of the AAAI Spring Symposium on Knowledge-Based Environments for Teaching and Learning, Palo Alto, CA, March, 1990.
- 4. **Gadd, CS**, Friedman CP, Miller DJ, Hughes M. Strategic information resources assessment. Proceedings of the1999 Veterans Affairs Information Technology Conference (August 9-13, 1999, Austin, TX).
- 5. Cooper GF, Fine MJ, **Gadd CS**, Obrosky DS, Yealy DM. Analyzing causal relationships between treating clinicians and patient admissions and mortality in low-risk pneumonia patients. Proceedings of the Society of Academic Emergency Medicine Annual Meeting (May 22-23, 2000, San Francisco, CA), p. 470.
- 6. Stanley E, **Gadd CS**, Friedman CP. The Pittsburgh IAIMS evaluation process. Journal of the American Medical Informatics Association (AMIA Fall Symposium Supplement). 1142; 2000.

- 7. Manning BK, **Gadd CS**. Introducing handheld computing into a residency program: Results from qualitative and quantitative inquiry. In: Proceedings of Science 2001: A Research Odyssey, Spotlight Session II "Informatics for 21st Century Science" sponsored by the University of Pittsburgh (Pittsburgh Pennsylvania, September 12-14, 2001. (Poster)
- 8. **Gadd CS**. Supporting loose confederacies of collaboration: Experiences from computational biology and 3D imaging collaboratories. Journal of the American Medical Informatics Association, Supplement issue on the Proceedings of the Annual Fall Symposium of the American Medical Informatics Association "Bio+medical Informatics: One Discipline" (November 9-13, 2002, San Antonio, Texas), Kohane IS (ed), Hanley & Belfus, Inc., Philadelphia, Pennsylvania, p. 1024, 2002 (Poster).
- 9. Durka-Pelok G, Pomerantz S, **Gadd CS**, Weymouth T, Gest T, Huang J, Nave D, Wetzel A, Lee S, Athey B. Evaluation of a volume browser: PSC-VB. Proceedings of the Fourth Visible Human Project Conference. Keystone, Colorado, October 17-19, 2002. Published on CD-ROM and online at http://www.uchsc.edu/sm/chs/events/vh_conf/proceedings.htm.
- 10. Epstein BA, Tannery NH, Wessel CB, Gadd CS. What did they do before it was online? Measuring information-seeking behavior of clinicians prior to initiation of access to electronic resources. Proceedings of the Medical Library Association 2003: Catch the Wave, San Diego, CA, May, 2003.
- 11. Tannery NH, Wessel CB, Epstein BA, **Gadd CS**. Using outcome measures to assess the information-seeking behavior of clinicians after access to online resources: a longitudinal cohort study. Proceedings of the Medical Library Association 2004: Seize the Power, Washington, DC, May, 2004.
- 12. Fridsma DB, **Gadd CS**. Teaching the Science of Safety: The Experience of University of Pittsburgh Center for Biomedical Informatics and the Pittsburgh Regional Healthcare Initiative. Proceedings of the IT in Health Care: Sociotechnical Approaches, Portland, OR, September 13-14, 2004.
- 13. Fischer GS, Wilson RR, **Gadd CS**. Patient Satisfaction with Secure, Web-Based Access to Medical Record and Electronic Communication with Office. Society for General Internal Medicine 2005 Annual Meeting, New Orleans, LA. May 11-14, 2005.
- 14. Tham E, Fridsma D, **Gadd, CS**. Implementation of Computerized Physician Order Entry at a Children's Hospital: Organizational Determinants of Success. American Academy of Pediatrics 2005 National Conference, Washington, DC. October 8-11, 2005.
- 15. McCoy AB, Peterson JF, **Gadd CS**, Danciu I, Waitman LR. A system to improve medication safety in the setting of acute kidney injury: initial provider response. AMIA Annu Symp Proc. 2008 Nov 6:1051.PMID: 18999252.

Other Publications

- 1. Evans DA, **Gadd CS**. Models for Automated Medical Consultation. Report No. CMU–LCL–86–2, Carnegie-Mellon University, 1986.
- 2. **Gadd CS**. Report of the NIH-National Center Research Resources Biomedical Collaboratories Workshop. (October 27-29, 2000, Pittsburgh, PA).
- 3. **Gadd CS**, Ozark S. Phase I evaluation report Baseline and initial assessment. National Center for Research Resources (NCRR), National Institutes of Health, Biomedical Collaboratories for Software Development Workshop (held at the Pittsburgh Supercomputing Center, Pittsburgh, Pennsylvania, October 20-27, 2000), Technical Report, 2000.

4. Tham E, **Gadd CS**, Fridsma DB. Passive to Active Resistance: A Subjectivist Analysis of the Implementation of Computerized Physician Order Entry at a Pediatric Hospital. DBMI Report Series No. DBMI-07-367. Masters Research Project, June 15, 2007.

Presentations at Scientific Meetings (Peer-reviewed)

- 1. **Gadd CS**, Baskaran P, Lobach DF. Identification of design features to enhance utilization and acceptance of systems for internet-based decision support at the point of care. Journal of the American Medical Informatics Association (AMIA Fall Symposium Supplement). 91-95; 1998.
- 2. **Gadd CS**, Friedman CP, Douglas G, Miller DJ. Information resources assessment of a healthcare integrated delivery system. Journal of the American Medical Informatics Association (AMIA Fall Symposium Supplement). 525-529; 1999.
- 3. **Gadd CS**, Penrod LE. Dichotomy between physicians' and patients' attitudes regarding EMR use during outpatient encounters. Journal of the American Medical Informatics Association (AMIA Fall Symposium Supplement). 275-279; 2000.
- 4. **Gadd CS**, Panelist. Global Health Information Exchange: the Role of Biomedical Informatics. Annual Fall Symposium of the American Medical Informatics Association (AMIA), November 2010.
- 16. **Gadd CS**, Delaney CW, Marin H, Greenwood K, Williamson JJ. Accelerating the Global Workforce Demand for Nurse Informaticians: Advanced Health Informatics Certification (AHIC). Nursing Informatics 2016, June 2016.
- 17. Silverman, HD, **Gadd, CS**, Doug Fridsma, D. A Tale of Two Practice Analyses: Clinical Informatics Subspecialty and Health Informatics. AMIA Clinical Informatics Conference, April 30 May 2, 2019.

Presentations at Scientific Meetings (Invited)

- Gadd CS, Identification of User Interface Attributes to Enhance Utilization and Acceptance of Clinical Decision Support Systems. Presented at the National Library of Medicine (NLM) Annual Training Directors' Meeting, Bethesda, MD, July 22-23, 1997.
- 2. **Gadd CS**, Overview of Medical Informatics. Presentation to the Medical Informatics Training for Africa (Med-ITA) Program Workshops, Abuja and Nsukka, Nigeria, April 25-27, 2000.
- 3. **Gadd CS**, Evaluation of Collaboratories for Biomedical Research Software Development. National Center for Research Resources (NCRR), National Institutes of Health Biomedical Collaboratories Workshop, Pittsburgh Supercomputing Center, Pittsburgh, PA, October 27-29, 2000.
- 4. **Gadd CS**, Med-ITA: Medical Informatics Training for Africa. International Training in Medical Informatics, Training Directors' Meeting, Fogarty International Center, National Institutes of Health, Bethesda, Maryland, November 3, 2000.
- 5. **Gadd CS**, Dichotomy Between Physicians' and Patients' Attitudes Regarding EMR Use During Outpatient Encounters. Panel on Health Care Process Improvement and Evaluation, Donald A.B. Lindberg Lecture and Symposium, Pittsburgh, PA, June 8, 2001.
- 6. **Gadd CS**, Evaluation, Collaboratories for Biomedical Research Software Development. Biomedical Initiative Advisory Panel, Pittsburgh Supercomputing Center, December, 2001.
- 7. **Gadd CS**, Valenta A, Co-Instructor. Manuscript Peer Review 101: A Guide to the (Critical) Reader (POI-WG workshop), Annual Fall Symposium of the American Medical Informatics Association (AMIA), November 9, 2002.

- 8. **Gadd CS**, Fridsma D, Co-Instructor. The Organizational Context of Information Technology: Perspectives, Tools, and Challenges (Tutorial), Annual Fall Symposium of the American Medical Informatics Association (AMIA), November 10, 2002.
- 9. **Gadd CS**, An Introduction to Evaluating Clinical Information Systems. Clinical Informatics Research Series, Stanford University, April 23, 2004.
- 10. **Gadd CS**, Panelist. Clinical Informatics as a Medical Specialty Progress Report. Annual Fall Symposium of the American Medical Informatics Association (AMIA), November 2009.
- 11. **Gadd CS**, Overview of the Vanderbilt-NARI-NIE Informatics Training Program, Vanderbilt-NARI-NIE Workshop on Informatics in Molecular Virology and Genetics related to HIV/AIDS and other Infectious Diseases, Pune, India, April 20, 2010.
- 12. Murphy J, **Gadd CS**, Co-Instructor. HIT System Lifecycle: Proven Project Management Methods Workshop, AMIA NOW! May 2010.
- 13. **Gadd CS**, Munger BS. Clinical Informatics as Medical Specialty Progress Report: Reactor Presentation and Discussion from Training Program Perspective, AMIA Academic Forum Fourth Annual Conference, Denver, Colorado, June 17, 2010.
- 14. **Gadd CS**, User perspectives on the usability of a regional health information exchange. JAMIA Journal Club Webinar, September 1, 2011.
- 15. **Gadd CS**, New Opportunities in Biomedical Informatics Graduate Education and Training, Department of Biomedical Informatics Graduate Seminar, University of Utah. October 6, 2011.
- 16. **Gadd, CS**, Informatics and the Integration of Research with Practice: The Critical Role of Training & Career Development, AAMC GREAT Group and GRAND Joint Annual Meeting, September 21, 2012.
- 17. **Gadd, CS,** Advanced Health Informatics Certification: Why, What, When, and How Can I Provide Input? AMIA Annual Symposium, November 14, 2016.
- 18. Gadd, CS, Advanced Health Informatics Certification Listening Sessions, iHealth, May 4, 2017.
- 19. Silverman, HD, **Gadd, CS**, Fridsma, D. A Tale of Two Practice Analyses: Clinical Informatics Subspecialty and Health Informatics. AMIA Clinical Informatics Conference, May 1, 2019.
- 20. Dykes P, **Gadd CS**, Hales, J, Fridsma D. Health Informatics Certification Update. AMIA Annual Symposium, November 18, 2019.