

CURRICULUM VITAE: MICHAEL HOGARTH, M.D.

PERSONAL INFORMATION

Work: 916-734-1619
Other: 916-287-1731 (Google Voice)
Email: mahogarth@ucdavis.edu
Website: <http://www.hogarth.org>

PRIMARY ACADEMIC APPOINTMENTS

Professor

Department of Pathology and Laboratory Medicine
University of California, Davis

Professor

Department of Internal Medicine
Division of General Medicine
University of California, Davis

OTHER APPOINTMENTS

Director

Division of Pathology Informatics
Department of Pathology and Laboratory Medicine
University of California, Davis

Faculty

Master of Public Health (MPH) program
UC Davis School of Medicine

Faculty

Health Informatics Graduate Group
UC Davis School of Medicine

Member

Computer Science Graduate Group
UC Davis School of Engineering

EDUCATION and TRAINING

1985	Texas A&M Bachelor of Science in Biomedical Engineering	College Station, TX
1991	University of Texas- Southwestern Doctor of Medicine (M.D.)	Dallas, TX
1995-1997	Medical Informatics Fellowship UC Davis School of Medicine	Sacramento, CA
1991-1992; 1994-1997	Internal Medicine UC Davis School of Medicine	Sacramento, CA
1992-1993	Pathology UC Davis School of Medicine	Sacramento, CA

CLINICAL

Fellow, American College of Physicians
California Medical Board License: A051060

HONORS AND AWARDS

Internal Medicine Teaching Award, UC Davis School of Medicine	1995
Tau Beta Pi Engineering National Honor Society	1985
<i>Cum laude</i>	1985

TEACHING - 2009/2010

Electronic Health Records (MHI202). University Extension, Health Informatics Program, Instructor of Record. ~40 students. Winter Quarter and Spring Quarter.

Introduction to Public Health Informatics (SPH210). Masters of Public Health Graduate program. Instructor of Record. ~25 students. Summer Session 2.

Electronic Medical Data (MDI208). Health Informatics Graduate Program. Instructor of Record. ~10 students. Spring Quarter.

GRADUATE STUDENTS

Bill Riedl - Masters Degree, Health Informatics.	Enrolled
Marco Gonzalez - Masters Degree, Health Informatics	Enrolled
Paul Singh Pannu - Masters Degree, Health Informatics	2009
Jay Zhou - Masters Degree, Medical Informatics.	2000
Gillian Hubble - Masters in Medical Informatics.	1999

FUNDING**ACTIVE:****2010 – 2014 Principal Investigator**

California Electronic Death Registration System (CA-EDRS)
 Interagency Agreement #09-11648
 Agency: California Department of Public Health (CDPH)
 \$ 8.6 million

2010 – 2013 co-Investigator/Dir. of Informatics

ATHENA Breast Health Network
 UC Multi-campus Research Program and Initiatives (MRPI)
 Agency: University of California, Office of the President
 \$ 5.2 million

2008 – 2010 co-Principal Investigator

TRANSCEND - TRANslational Informatics System to
 Coordinate Emerging Biomarkers, Novel Agents, and Clinical Data
 SAIC-Frederick subcontract # 28XS197
 Agency: National Cancer Institute (NCI)
 \$ 1.1 million

2008 – 2010 co-Investigator/Dir. of Informatics

BreastCancerTrials.org
 Funded through a gift from the SAFEWAY Corporation
 \$ 2.0 million

COMPLETED:**2004 – 2009 Principal Investigator**

California Electronic Death Registration System (CA-EDRS)
 Interagency Agreement: 04-35764 (2004 – 2009)
 Agency: California Department of Public Health (CDPH)
 \$ 7.0 million

- 2008-2009 Co-Principal Investigator**
A Biospecimen Repository Infrastructure for UC Davis
Center Award, UC Davis Center for Clinical and Translational Science (CTSC)
\$ 50,000
- 2007 - 2008 Co-Investigator**
A Customized Care Plan for Breast Cancer Patients
Jointly funded by:
Robert Wood Johnson (RWJ) Foundation, Project Health Design
\$ 50,000
California Healthcare Foundation (CHCF)
\$300,000
- 2003 – 2005 Principal Investigator**
California Electronic Death Registration System (CA-EDRS)
Design, Development, and Implementation
Interagency Agreement: 04-35764 (2004 – 2009)
\$ 1.98 million
- 2003 – 2007 Co-Principal Investigator**
Blueprint for Regional Excellence in Breast Cancer
Department of Defense subaward
\$ 6.7 million
- 2002 – 2006 Co-Investigator**
Center for Biophotonics, Informatics Group
National Science Foundation
\$ 38.9 million
- 2001– 2006 Co-Principal Investigator**
Informatics of Human and Monkey Brain Atlases
National Institute of Mental Health
\$ 5.05 million
- 2001 – 2004 Co-Principal Investigator**
Informatics Tools to Reduce Warfarin Errors
Agency for Healthcare Quality Research (AHRQ)
\$ 2.0 million

PUBLICATIONS

Hogarth M, Hajopoulos K, Young M, Cowles N, Churin J, Hornthal B, Esserman L. The Communication and care plan: A novel approach to patient-centered clinical information systems. *J Biomed Inform.* 2010 Oct;43(5 Suppl):S6-8.

Riedl A, Than N, **Hogarth M**. Using the UMLS and Simple Statistical Methods to Semantically Categorize Causes of Death on Death Certificates. *Proc AMIA Symp.* 2010.

Bishop M, Cummins J, Peisert S, Singh A, Bhume B, Agarwal D, Frincke D, **Hogarth M**. Relationships and data sanitation: A study in scarlet. *New Security Paradigms Workshop Proc.* 2010.

Yellowlees PM, Marks LS, **Hogarth M**, Turner S. Standards-based, open-source electronic health record systems: A desirable future for the U.S. health industry. *Telemed J E Health*, 14(3):284-8. 2008.

Yellowlees PM, **Hogarth M**, Hilty DM. The importance of distributed broadband networks to academic biomedical research and education programs. *Acad Psychiatry.* 30(6):451-5. 2006.

Hogarth MA, Turner S. A Study of Clinically Related Open Source Software Projects. *Proc AMIA Symp.* 330-334. 2005.

Kravitz RL, Neufeld JD, **Hogarth MA**, Paterniti DA, Dager W, White R. The Long Road from Insight to Implementation: Lessons from a Multi-site Trial of a PDA-Based Warfarin Dose Calculator Advances in Patient Safety: From Research to Implementation. *Agency for Healthcare Research and Quality (AHRQ)*; Feb 2005; 395-409.

Cardiff RD, Rosner A, **Hogarth MA**, Galvez JJ, Borowsky AD, Gregg JP. Validation of the new challenge for pathology. *Toxicologic Pathology*, 32 Suppl 1:31-9. 2004.

Elkin PL, Brown SH, Lincoln MJ, **Hogarth M**, Rector A. A Formal Representation for Messages Containing Compositional Expressions. *International Journal of Medical Informatics (IJMI)*. 71(2-3):89-102. 2003. (pubmed id: 14519402)

Srinivas PR, Gusfield D, Mason O, Gertz M, **Hogarth M**, Stone J, Jones EG, Gorin, FA. Semi- automated generation of neuroanatomical terms and acronyms with a comparison between two neuroanatomical terminologies. *Neuroinformatics Journal*, 1(2):177-192. 2003.

Howell LP, **Hogarth M**, Anders TF. Implementing a Mission-Based Reporting System at an Academic Health Center. *Academic Medicine*. 78(6):645-51. (pubmed id: 12805050). 2003.

Gertz M, Sattler KU, Gorin FA, **Hogarth MA**, Stone J: Annotating Scientific Images: A Concept-based Approach. Proceedings of the 14th International Conference on Scientific and Statistical Database Management. 2002.

Howell LP, **Hogarth M**, Anders TF. Creating a Mission-based Reporting System at an academic healthcenter. Acad Med. 77(2):130-8. (pubmed id: 11841972). 2002.

Gorin FA, **Hogarth MA**, Gertz M. The challenges and the rewards of integrating diverse neuroscience information. Neuroscientist. 7(1):18-27. (pubmed id: 11486341). 2001.

Zhou J, **Hogarth MA**, Walters RF, Green R, Nesbitt TS, Hybrid System for Telepathology. Human Pathology 31(7): 829-833, (pubmed id: 10923920). 2000.

Hogarth MA, Gertz M, Gorin FA. Terminology query language: a server interface for concept-oriented terminology systems. Proc AMIA Symp.349-53. (pubmed id: 11079903). 2000.

Hogarth MA, Bencken V. Publishing on the Web: Who is responsible for the information anyway?, Healthcare Intranet Report. 1998.

Hogarth MA, Bencken V. Web Publishing Policies: The UC-Davis Health System Experience, Healthcare Intranet Report. 1998.

Hogarth MA. A Medical Publishing Tool for the Information Age, Healthcare Intranet Report. 1998.

Hogarth MA. "Web E-Mail: Extending POP Mail to Nomadic Users". Healthcare Intranet Report. 1998.

Hogarth MA. "Informatics and Computing: The Internet at the Crossroads". Developer.com Tech Focus. 1998.

Hogarth M. "Informatica medica: um pouco de historia". Informatica Medica. 1998. Vol 1, Issue 5 (<http://www.epub.org.br/informaticamedica/n0105/hogarth.htm>)

Hogarth M, Sabbatini R. "Informatica e a Medicina do Seculo 21". Informatica Medica Vol 1, Issue 2. 1998.

Hogarth MA. Newsgroups in Medicine, Informatica, (Portuguese). 1998.

Hogarth MA. "Java Servlets: A Novel Framework for Web Programming". Healthcare Intranet Report. 1998.

Hogarth M, Bechtold T, Esserman L. An XML-based specification for electronic patient reported data exchange. Proc AMIA Symp. 2010

Hogarth MA, Esserman L. Development of an Integrated Platform for Breast Cancer Care Era of Hope Annual Symposium, Dept. of Defense, Baltimore, MD. 2008.

Esserman LJ, **Hogarth M**, Melisko M, Hwang S, Ewing C, Cohen E, Belkora J, Ozanne E, Rugo H, Rayamajhi S, Mahoney E, Kamerick M, Mendelsohn M, Park J. Blueprint for Regional Excellence in Breast Cancer (view paper). Era of Hope Annual Symposium, Dept. of Defense, Baltimore, MD. 2008.

Esserman LJ, Mendelsohn M, Cohen E, Spillman A, Pederson J, Melisko M, Ananc A, Laird J, Ernest ML, Hamlosky D, Park J, **Hogarth M**, Bechtold T, Weiss LT. Using Patient Self-reported Data to Increase Access and Improve Quality of Care. Era of Hope Annual Symposium, Dept. of Defense, Baltimore, MD. 2008.

Cohen EJ, Bechtold T, Laird J, Anand A, Ernest ML, Pederson, Melisko M, Park J, **Hogarth MA**, Esserman L. BreastCancerTrials.org: From Regional Pilot to Nationwide Clinical Trial Matching Service. 30th Annual San Antonio Annual Breast Cancer Symposium. San Antonio, TX. 2007

Cohen EJ, Schreiner J, Tyler J, Deering MJ, Grama LM, Duggan B, Laird JL, Bhatia V, **Hogarth M**, Lieberman M, Esserman LJ, Park JW. BreastCancerTrials.org: Feasibility of an online, patient-centered clinical trial matching service. 30th Annual San Antonio Annual Breast Cancer Symposium. San Antonio, TX. 2007

Hogarth MA, Sanket Bansal, Abhijhat Upadhyay, Kevin Kunkel, Glenna Gobar. A Novel Voice Signature Method for Electronic Death Registration Systems. Proc AMIA Symp. 981. 2005.

J.Schreiner, J. Tyler, E.Cohen, **M.Hogarth**, L.Esserman. S.Subman, M.Deering, L.Grama, H.Massett, B.Duggan, JJ Jaurer, C.Griffin, S.Patel. caMATCH: A Pilot Research Project in Patient Entered PHRs for Clinical Trial Matching Services. NIH Research Festival. 2005

Michael Kamerick, Michael Dore, Anna Simonenko, **Michael Hogarth**, Jeff Belkora, Laura Esserman. "A General Platform for the Delivery of Point of Care Applications, Clinical Decision Aids, and Patient Interactions: Informatics Systems of the Center of Excellence at UCSF " - NCI . 2005.

Hogarth MA, Gertz M, Gorin FA. jTerm: An Open Source Terminology Server. AMIA Fall Symposium. 2003.

Srinivas, PR, Gusfield D, Mason O, Gertz M, **Hogarth M**, Stone J, Jones E, Gorin F. Extraction and Comparison of Neuroanatomical Concepts using a 'Hybrid' Statistical Parser coupled to a Concept-based Vector Space Model, Human Brain Project conference, NIH/NIHM, Washington DC. 2003.

Hogarth MA, Gertz M, Gorin, FA Linking Images to Knowledge through Concept-based Mediation, COAST Conference, Asilomar, CA. 2002.

Hogarth MA, Stone J, Gorin, FA jTerm: A Server for Terminological Systems, AMIA Fall Symposium, Washington DC. 2001.

J. Zhou, MD, **M.A. Hogarth**, MD, R.F. Walters, PhD, R. Green, MD, and T.S. Nesbitt, MD. Telepathology Using Dual Camera Hybrid System. Proceedings of the Symposium of Computer Applications in Medicine (SCAMC). 2000.

BOOKS

Hogarth M, Hutchinson D. An Internet Guide for the Health Professional, 2nd edition (New Wind Publishing, Sacramento, CA) ISBN 0 965 14120 9. 1996

Hutchinson D, **Hogarth, M**. A Pocket Guide to the Medical Internet. 1996. (New Wind Publishing, Sacramento, CA)

Hogarth M. An Internet Guide for the Health Professional, 1st ed. 1995.
Electronic version <http://informatics.ucdavis.edu/mikehogarth/pubs/MedGuide.pdf>

BOOK CHAPTERS

Jose J. Galvez, Robert J. Munn, Andrew S. Garbutt, **Michael A Hogarth**, Betty I. Tarnowski, and Robert D. Cardiff. Development of a Whole Slide Image Archive. In Virtual Slides in Teaching, Diagnosis, and Research. Advances in Pathology, Microscopy, and Molecular Morphology. Eds. Gu and Hacker. Taylor and Francis. pp325-335. 2005.

Nesbitt T, Hilty DM, **Hogarth MA**, Yellowlees P. Rural Health Care in the Digital Age: The Role of Information and Telecommunication Technologies in the Future of Rural Health. Quality Through Collaboration: The Future of Rural Healthcare. Institute of Medicine (IOM) Report. 2005.

PRESENTATIONS**2010**

"TRANSCEND: The Role of Informatics in Complex Clinical Trials". Georgetown Informatics Seminar. Nov 2010.

"EHR lessons learned: The good, the bad, and the ugly." California Medical Association Leadership Academy. April 2010. San Diego, CA.

"HIT 101: What health information technology means for medical practice -- and why you should care." California Medical Association Leadership Academy. April 2010. San Diego, CA

"TRANSCEND: Moving towards agile clinical trials." UC San Diego Cancer Center Informatics Seminar. March 2010. San Diego, CA.

2009

"Using caBIG to Support Adaptive Clinical Trials". caBIG NCI Annual Session. Washington DC. Jul 2009

"An Informatics Architecture for Comparative Effectiveness and Practice Change". Redwood MedNet Annual Conference. Healdsburg, CA. Jul 2009

"TRANSCEND: Informatics and clinical trials". Personalized Medicine 2.0. San Francisco State University. Jun 2009

"Health Information Technology: An Overview". Guest Lecture, CITRIS, UC Berkeley, Berkeley, CA Mar 2009

2008

"Clinical Trials in the Age of Personalized Medicine". UC Davis Department of Pathology Grand Rounds, Sacramento, CA Nov 2008

"Building Software: An Artful Science". UCSF Breast Cancer Center of Excellence, San Francisco, CA Nov 2008

"Medicine and Web2.0: Blogs, Wikis, Podcasts, PHRs, Oh My! Connecting California to Improve Patient Care 2008". Ukiah, CA July 2008

"Cancer Informatics: Accelerating Cancer Discoveries". UC Davis Cancer Center Annual Retreat, Sacramento, CA Aug 2008

"Pathology Informatics: An Emerging Discipline". UC Davis Department of Pathology Retreat. Lake Tahoe, CA. May 2008.

"Social Network Analysis: Evaluating Translational Collaboration." Health Informatics Program. UC Davis Clinical and Translational Science Center, Apr. 2008

"Here comes molecular medicine: Are EMR's ready?". Molecular Medicine tri-conference, San Francisco, CA. Apr 2008.

"An Automated Method to Characterize Medical Informatics Research Themes and Collaborative Networks". 3rd Annual UC Davis Health Informatics Symposium, Sacramento, CA. Mar 2008.

"Terminologies, data standards, and other Informatics stuff". Center for Information Technology in Society (CITRIS), Berkeley. Mar 2008

2007

"Learning to use the Healthcare Internet: A Guide for Patients.". UC Davis Cancer Center. 2007. Nov. 2007.

"The Internet and cancer: Truth or Tale". UC Davis Cancer Center Seminar Series. Dec. 2007.

"The Internet and healthcare: An update". Ukiah, CA. Oct 2007.

"Discerning use of Web-based information for pathology: Wikipedia and beyond." Association of Pathology Chairs Annual Meeting. Colorado Springs, CO. Jul 2007.

"Using the UMLS MetaMap as a Cause of Death Analyzer.". NAPHSIS Annual Conference. Salt Lake City, Utah. Jun 2007.

2006

"When your patient dies". UC Davis Internal Medicine Resident Lecture Series. UCDMC. Sacramento. Nov 2006.

"Public Health Informatics: An Overview". Data Policy Access Committee, California Department of Health Services. Nov 2006.

"Mortality Statistics: Understanding Death". Longevity Course, UC Davis. Apr 2006.

"The California Electronic Death Registration System: Building and Deploying a Mission Critical System for California.". Health Informatics Seminar, UCDMC, Sacramento. Jan 2006.

2005

"The Electronic Health Record of the Future: Integrating Molecular Information".

Data Integration in the Life Sciences (DILS) Conference, San Diego. Jul 2005.

"The Biophotonics Network: Using Social Network Analysis to Characterize Scientific Collaboration in Biophotonics". UCD Center for Biophotonics Annual Meeting. Squaw Valley, CA. Jul 2005.

"Remote Attestation of Death Certificates in California". NAPHSIS Annual Meeting, Cincinnati. Jun 2005.

2004

"From Data to Information: Automating Death Certificate Registration in California" California Public Health Association Joint Annual Meeting. Oakland, CA. Apr 2004.

"Illuminating Pathways to Collaborative Scientific Discovery". Lawrence Livermore National Laboratory Science Seminar, Livermore CA. Nov 2004.

"Introduction to the California Electronic Death Registration System". California Coroner's Association, San Diego. Aug 2004.

"The Biophotonics Roadmap: Knowledge Mining in a Scientific Community". Annual Conference of the UC Davis Center for Biophotonics, Davis, Jun 2004

"Medical Informatics 101". USC School of Business Healthcare Information Technology Lectures. Sacramento. Jun 2004.

"Public Health Informatics". USC School of Business Healthcare Information Technology Lectures. Sacramento. Jun 2004

"Clinically Relevant Open Source Software: The CROSS Project". UCSF Breast Cancer Center of Excellence Annual Conference, San Francisco. May 2004.

"Introduction to caMATCH: A clinical trials matching system". UCSF Breast Cancer Center of Excellence Annual Conference, San Francisco. May 2004.

"Introduction to Electronic Death Registration". California Annual Conference of Local Health Officers, Yosemite, CA. May 2004.

"Medical Informatics and Pharmacists". Ohio State University School of Pharmacy PHR721D Course. Lecture conducted over the Internet using Voice-over-IP and whiteboard technology from, Sacramento. Mar 2004.

"Cutting-Edge Technology: A Medical Odyssey". UC Davis Coming of Age Lecture Series, Sacramento, CA. Apr 2004.

2003

"Computerized Provider Order Entry: The Problem and Possible Solutions". Annual Meeting of the California Society of Health-System Pharmacists. Sacramento. Oct 2003

"Building an ontology for neurosciences: the pragmatics of knowledge representation in a scientific discipline". UC Davis Dept. of Pathology Grand Rounds. May 2003.

"Moving Towards Computer Based Patient Record Systems". USC School of Business Healthcare Information Technology Lectures. Sacramento. Apr 2003.

"Medical Informatics: An Introduction". USC School of Business Healthcare Information Technology Lectures. Sacramento Apr 2003.

2002

"A Framework for Open Development of Terminologies". HL-7 Vocabulary TC Meeting, Boston. Aug 2002.

"Building a Semantic Web for Neuroscience". Sun Microsystems Computational Biology Symposium, Santa Clara, CA. Oct 2002.

"Informatics for Medical Technologist". Annual Meeting of the California Association of Medical Laboratory Technologists (CAMLt). Anaheim, CA. Oct 2002.

2001

"jTerm: A Healthcare Terminology Server". TEPR Conference, Boston, MA. May 2001.

"Caught in the Medical Web" Doctor's Hospital Annual Trauma Conference, Doctor's Hospital, Modesto. May 2001.

2000

"Linking images to knowledge with concept-based mediation: Telepathology 2000". UC Davis Medical Center. Aug 2000.

"Role of Informatics in Medicine". UC Davis Neurology Grand Rounds, Sacramento. July 2000

"The Art of Medicine: Making Decisions Under Uncertainty". UC Davis Pathology Course Lecture. May 2000.

"Using the web and telemedicine to improve women's health". UC Davis Women's Health Mini-school, Sacramento, CA. Mar 2000.

1999

"Medical terminology systems for the 21st century". Center for Health Services Research Seminar Series, UC Davis Medical Center. Sacramento. May 1999.

1998

“Medicine in the Information Age” Marshall Hospital Grand Rounds, Placerville, CA.
Aug 1998

MEMBERSHIPS

Member, American Medical Informatics Association (AMIA)

Member, National Association of Public Health Statistics and Information Systems
(NAPHSIS)

Member, Health Level – 7 (HL-7)

Member, California Medical Association (CMA)

ACADEMIC/PROFESSIONAL ACTIVITIES

Member - MPH Program Curriculum Committee	2007-2010
Chair – UC Davis Academic Senate Committee on IT	2007 - 2008
Member – UC IT and Telecommunications Committee (ITTP)	2007 - 2008
Member – UC Davis Campus Council for IT (CCFIT)	2007 - 2008
Member – UC Davis MediaWorks Faculty Board	2003 – 2005
Member – UC Davis Dean’s Medical Informatics Advisory Council	2002 – 2003
Member – Electronic Medical Record Steering Committee	2001 – 2003
Member – UCD School of Medicine Educational Advisory Board (EAB)	2000
Member – UC Davis Health Sciences Library Committee	1999-2001
Member – UC Davis School of Medicine CME Advisory Committee	1999-2000
Member – UC Davis School of Medicine IT Oversight Committee	1998-2000
Member – Oncology IT Steering Committee, UC Davis Health	1997-1998
Member– EMR Committee, UC Davis Medical Center	1996-1997

PROFESSIONAL and COMMUNITY SERVICE

Co-Chair, Research and Technology Sub-Committee California Department of Public Health Strategic Planning Committee	2009
Advisor, Redwood MedNet Health Information Exchange, Ukiah, CA	2008-present
Open Source Working Group, American Medical Informatics Association	2003-present
Vocabulary Technical Committee, Health Level – 7 (HL-7)	2002-present
Commission on Pain Management, HCRI Institute (HCRI), Sacramento, CA	2002-2005
College of American Pathologists SNOMED RT advisory group	2001-2002
Quality Data Information System Project Advisor, Western Health Alliance (WHA), Sacramento, CA	1999-2000
Advisor, University Pathology Consortium (UPC)	1998-2000
Pharmacy Working Group, California CALINX project	1998-1999
Internet Working Group, American Medical Informatics Association	1996-1998