

BIOGRAPHICAL SKETCH

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NAME Henry Lowe, M.D.	POSITION TITLE Associate Professor of Medicine (Informatics) Senior Associate Dean for Information Resources & Technology Director, Stanford Center for Clinical Informatics Director, Stanford CTSA Translational Informatics Program		
eRA COMMONS USER NAME (credential, e.g., agency login)			
EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)</i>			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
University College Dublin Medical School, Ireland Harvard Medical School, Cambridge MA	MD Fellowship	1980 1984-1989	Medicine Biomedical Informatics

A. Positions and Honors

Positions and Employment

1981-1982 Internship in Medicine and Surgery, Mater Misericordiae University Hospital, Dublin, Ireland
 1982-1983 Internal Medicine Residency, St. Elizabeth's Hospital, Tufts University, Boston MA
 1983-1984 Resident in Neurology, Tufts New England Medical Center, Boston, MA
 1984-1989 Fellow in Medicine and Medical Informatics, Harvard Medical School, Boston MA
 1989-1992 Instructor in Medicine, Harvard Medical School, Boston MA
 1990-1992 Director, Laboratory of Medical Informatics, University College Dublin, Ireland
 1992-1997 Assistant Professor of Medicine (Informatics), Department of Medicine, University of Pittsburgh
 1994-1996 Co-Director, Section of Medical Informatics, University of Pittsburgh
 1996-2001 Director, Clinical Multimedia Laboratory, University of Pittsburgh
 1997-2001 Associate Professor of Medicine & Intelligent Systems, University of Pittsburgh
 1998-2001 Director of Cancer Informatics, University of Pittsburgh Cancer Institute
 2000-2001 Director, Benedum Oncology Informatics Center, Univ. of Pittsburgh Cancer Institute
 2001-present Associate Professor of Medicine (Informatics), Stanford University School of Medicine
 2002-present Senior Associate Dean for Information Resources & Technology, Stanford School of Medicine
 2004-present Director, Stanford Center for Clinical Informatics
 2008-present Director, Stanford CTSA Translational Informatics Program

Honors

1984 Board Certification, American Board of Internal Medicine
 1997 Semi-finalist, Global Information Infrastructure Health Award
 1998 Elected Fellow of the American College of Medical Informatics
 2001 Awarded Tenure University of Pittsburgh

Selected Publications

1. Lowe HJ, Ferris TA, Hernandez PM, Weber SC. STRIDE: An Integrated Standards-Based Translational Research Informatics Platform. *AMIA Annu Symp Proc 2009 (In Press)*
2. Lowe HJ, Huang Y, Regula DP. Using a Statistical Natural Language Parser Augmented with the UMLS Specialist Lexicon to Assign SNOMED CT Codes to Anatomic Sites and Pathologic Diagnoses in Full Text Pathology Reports. *AMIA Annu Symp Proc 2009 (In Press)*
3. Hernandez PM, Podchyska T, Weber SC, Ferris TA, Lowe HJ. Automated Mapping of Pharmacy Orders from Two Electronic Health Record Systems to RxNorm within the STRIDE Clinical Data Warehouse. *AMIA Annu Symp Proc 2009 (In Press)*
4. Chen DP, Weber SC, Constantinou PS, Ferris TA, **Lowe HJ**, Butte AJ. Novel integration of hospital electronic medical records and gene expression measurements to identify genetic markers of maturation. *Pac Symp Biocomput. 2008; 234-54*
5. Chen DP, Weber SC, Constantinou PS, Ferris TA, Lowe HJ, Butte AJ. Clinical Arrays of Laboratory Measures, or “Clinarrays, built from an electronic Health Record Enable Disease Subtyping by Severity. *AMIA Annu Symp Proc (2007) 11:115-9*
6. Huang Y, **Lowe HJ**. A Novel Hybrid Approach to Automated Negation Detection in Clinical Radiology Reports *J Am Med Inform Assoc. 2007 May-June;14(3):304-311*
7. Huang Y, **Lowe HJ**. A grammar-based classification of negations in clinical radiology reports. *AMIA Annu Symp Proc 988 (2005)*
8. Huang Y, **Lowe HJ**, Klein D, Cucina RJ Improved identification of noun phrases in clinical radiology reports using a high-performance statistical natural language parser augmented with the UMLS specialist lexicon. *J Am Med Inform Assoc 2005 May-Jun; 12: 3: 275-85*
9. Huang Y, **Lowe HJ**, Hersh WR A pilot study of contextual UMLS indexing to improve the precision of concept-based representation in XML-structured clinical radiology reports. *J Am Med Inform Assoc 2003 Nov-Dec; 10: 6: 580-7*
10. Moffett SE, Menon AS, Meites EM, Kush S, Lin EY, Grappone T, **Lowe HJ** Preparing doctors for bedside computing. *Lancet 2003; 362: 9377: 86*

11. Ferris TA, Garrison GM, **Lowe HJ** A proposed key escrow system for secure patient information disclosure in biomedical research databases. *Proc AMIA Symp* 2002; 245-9
12. Rollman BL, Hanusa BH, **Lowe HJ**, Gilbert T, Kapoor WN, Schulberg HC A randomized trial using computerized decision support to improve treatment of major depression in primary care. *J Gen Intern Med* 2002; 17: 7: 493-503
13. Mast CG, Caruso MA, Gadd CS, **Lowe HJ** Evaluation of a filmless radiology pilot--a preliminary report. *Proc AMIA Symp* 2001; 443-7
14. Hersh W, Mailhot M, Arnott-Smith C, **Lowe HJ** Selective automated indexing of findings and diagnoses in radiology reports. *J Biomed Inform* 2001; 34: 4: 262-273
15. Rollman BL, Hanusa BH, Gilbert T, **Lowe HJ**, Kapoor WN, Schulberg HC The electronic medical record. A randomized trial of its impact on primary care physicians' initial management of major depression [corrected]. *Arch Intern Med* 2001; 161: 2: 189-97
16. Crowley RS, Gadd CS, Naus G, Becich M, **Lowe HJ** Defining the role of anatomic pathology images in the multimedia electronic medical record--a preliminary report. *Proc AMIA Symp* 2000; 161-5
17. **Lowe HJ**, Transforming the cancer center in the 21st century. *MD Comput* 1999 May-Jun; 16: 3: 40-2
18. **Lowe HJ**, Antipov I, Hersh W, Smith CA, Mailhot M Automated semantic indexing of imaging reports to support retrieval of medical images in the multimedia electronic medical record. *Methods Inf Med* 1999; 38: 4-5: 303-7
19. **Lowe HJ**, Multimedia electronic medical record systems. *Acad Med* 1999; 74: 2: 146-52
20. Rollman BL, Gilbert T, **Lowe HJ**, Kapoor WN, Schulberg HC The electronic medical record: its role in disseminating depression guidelines in primary care practice. *Int J Psychiatry Med* 1999; 29: 3: 267-86
21. **Lowe HJ**, Antipov I, Hersh W, Smith CA Towards knowledge-based retrieval of medical images. The role of semantic indexing, image content representation and knowledge-based retrieval. *Proc AMIA Symp* 1998; 882-6
22. Lomax EC, **Lowe HJ** Information needs research in the era of the digital medical library. *Proc AMIA Symp* 1998; 658-62

23. **Lowe HJ**, Lomax EC, Polonkey SE The World Wide Web: a review of an emerging internet-based technology for the distribution of biomedical information. *J Am Med Inform Assoc* 1996 Jan-Feb; 3: 1: 1-14
24. **Lowe HJ**, Antipov I, Walker WK, Polonkey SE, Naus GJ WebReport: a World Wide Web based clinical multimedia reporting system. *Proc AMIA Annu Fall Symp* 1996; 314-8
25. **Lowe HJ**, Walker WK, Polonkey SE, Jiang F, Vries JK, McCray A The Image Engine HPCC Project. A Medical Digital Library System using Agent-Based Technology to Create an Integrated View of the Electronic Medical Record. *Advances in Digital Libraries* 1996; 45-56
26. **Lowe HJ**, Walker WK, Vries JK Using agent-based technology to create a cost effective, integrated, multimedia view of the electronic medical record. *Proc Annu Symp Comput Appl Med Care* 1995; 441-4
27. **Lowe HJ**, Buchanan BG, Cooper GF, Vries JK Building a medical multimedia database system to integrate clinical information: an application of high-performance computing and communications technology. *Bull Med Libr Assoc* 1995; 83: 1: 57-64
28. **Lowe HJ**, Buchanan BG, Cooper GF, Kaplan B, Vries JK Image Engine an Integrated Multimedia Clinical Information System *MEDINFO* 1995; 8: 1: 421-5
29. **Lowe HJ**, Barnett GO Understanding and using the medical subject headings (MeSH) vocabulary to perform literature searches. *JAMA* 1994; 271: 14: 1103-8
30. **Lowe HJ**, Image Engine: an object-oriented multimedia database for storing, retrieving and sharing medical images and text. *Proc Annu Symp Comput Appl Med Care* 1993; 839-43
31. **Lowe HJ**, Barnett GO Evaluation of a microcomputer system for searching the MEDLINE Database *Proc Annu Symp Comput Appl Med Care* 1989; 445-447
32. Elkin PL, Cimino JJ, **Lowe HJ** Mapping to MeSH - The art of trapping MeSH Equivalence from within narrative text *Proc Annu Symp Comput Appl Med Care* 1988; 185-190
33. **Lowe HJ**, Barnett GO Remote Access MicroMeSH: A Microcomputer System for Searching MEDLINE *Proc Annu Symp Comput Appl Med Care* 1988; 535-539

Program Director/Principal Investigator (Last, First, Middle):

34. **Lowe HJ**, Barnett GO MicroMeSH: A Microcomputer System for Searching and Exploring the National Library Medicine's Medical Subject Headings (MeSH) Vocabulary *Proc Annu Symp Comput Appl Med Care* 1987; 717-720
35. Hupp JA, Cimino JJ, Hoffer EP, **Lowe HJ** DXPLAIN: A Computer-Based Diagnostic Knowledge Base *MEDINFO* 1986; 8: 1: 117-121
36. **Lowe HJ**, Barnett GO, Scott J Remote Access MicroMeSH: An Enhanced Microcomputer System for Searching the MEDLINE Database *Proc Annu Symp Comput Appl Med Care* 1986; 1009-1011