

BIOGRAPHICAL SKETCH

Provide the following information for the key personnel and other significant contributors in the order listed on Form Page 2.
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NAME McCray, Alexa T.		POSITION TITLE Associate Professor of Medicine, Harvard Medical School	
eRA COMMONS USER NAME MCCRAY			
EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)			
INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Skidmore College, Saratoga Springs, NY	BA	1969	Modern Languages
Boston College, Boston, MA	MA	1972	German Lit. & Language
Georgetown University, Washington, DC	MS	1977	Linguistics
Georgetown University, Washington, DC	PhD	1981	Linguistics, w/ distinction

A. Positions and Honors.**Positions and Employment**

1979-1980 Research Affiliate, Linguistics & Philosophy, MIT, Cambridge, MA
 1981-1984 Assistant Professor, Linguistics, Georgetown University, Washington, DC
 1984-1985 Research Staff Member, Computer Sciences, IBM T.J. Watson Research Center, Yorktown, NY
 1986-1992 Scientist, Lister Hill National Center for Biomedical Communications, NLM, Bethesda, MD
 1992-1997 Branch Chief, Lister Hill National Center for Biomedical Communications, NLM, Bethesda, MD
 1997-2004 Director, Lister Hill National Center for Biomedical Communications, NLM, Bethesda, MD
 2005-2006 Lecturer on Medicine, Harvard Medical School
 2005-present Co-Director, Center for Biomedical Informatics; Deputy Director, Countway Library of Medicine, Harvard Medical School
 2006-present Associate Professor of Medicine, Harvard Medical School

Other Experience and Professional Memberships

Member of the Executive Committee, The Autism Consortium, 2006- ; Member of the Board, American Medical Informatics Association, 1999-2000; Member of the Board, International Medical Informatics Association, 1997-1999; Co-Editor-in-Chief, *Methods of Information in Medicine*, 2001- ; Editorial Board Member, *Journal of the American Medical Informatics Association*, 1995- ; Editorial Board Member, *Methods of Information in Medicine*, 1999-2001; Faculty, *Medical Informatics: A course for health professionals*, October 2000- ; Member, U.S. Government Senior Executive Service, 1997-2004; Chair, Informatics Working Group, The Autism Consortium, 2006- ; Chair, Publications Committee, American Medical Informatics Association, 1998-2001; Member, Publications Committee, American Medical Informatics Association, 1994-1997; Member, Executive Committee, American College of Medical Informatics, 1995-1999; Member, program committees Medinfo 2004, ISMB/ECCB 2004, Joint Conference on Digital Libraries, 2001-2004, ACM Digital Libraries, 1998-2000, IEEE Advanced Digital Libraries, 1996-1999, American Medical Informatics Association, Fall Symposium, 1996, 1997, 2003, 2007; Chair, Scientific Program Committee, Medinfo 2007.

Honors

Member, Institute of Medicine of the National Academy of Sciences, elected 2001
 Fellow, American Association for the Advancement of Science, elected 1998
 Fellow, American College of Medical Informatics, elected 1994
 Innovations in American Government Award, for ClinicalTrials.gov, Harvard University, presented 2004
 Priscilla Mayden Award, American Medical Informatics Association, presented 1996
 Vice President Gore's Plain Language Award for ClinicalTrials.gov, presented 2001
 NLM Director's Award, presented 2000
 NIH Director's Award, presented 1997

B. Selected peer-reviewed publications (in chronological order).

(Publications selected from 60 peer-reviewed publications)

1. McCray AT, Srinivasan S. Automated access to a large medical dictionary: online assistance for research and application in natural language processing. *Comput Biomed Res.* 1990; 23(2):179-98.
2. Lindberg DA, Humphreys BL, McCray AT. The Unified Medical Language System. *Methods Inf Med.* 1993; 32(4):281-91.
3. McCray AT, Aronson AR, Browne AC, Rindfleisch TC, Razi A, Srinivasan S. UMLS knowledge for biomedical language processing. *Bull Med Libr Assoc.* 1993; 81(2):184-94.
4. McCray AT. Representing biomedical knowledge in the UMLS Semantic Network. *High-Performance Medical Libraries: Advances in Information Management for the Virtual Era.* Westport: Meckler Publishing, 1993; 45-55.
5. McCray AT, Nelson SJ. The representation of meaning in the UMLS. *Methods Inf Med.* 1995; 34(1-2):193-201.
6. Humphreys BL, Hole WT, McCray AT, Fitzmaurice JM. Planned NLM/AHCPR large-scale vocabulary test: using UMLS technology to determine the extent to which controlled vocabularies cover terminology needed for health care and public health. *J Am Med Inform Assoc.* 1996; 3(4):281-7.
7. McCray AT. Conceptual complexity in biomedical terminologies: The UMLS approach. *Classification and Knowledge Organization*, Berlin: Springer Verlag, 1997; 475-89.
8. Humphreys BL, McCray AT, Cheh ML. Evaluating the coverage of controlled health data terminologies: report on the results of the NLM/AHCPR large scale vocabulary test. *J Am Med Inform Assoc.* 1997; 4(6):484-500.
9. McCray AT. The nature of lexical knowledge. *Methods Inf Med.* 1998; 37(4-5):353-60.
10. McCray AT. A national resource for information on clinical trials. *National Forum.* 1999; 17:19-21.
11. McCray AT, Ide NC. Design and implementation of a national clinical trials registry. *J Am Med Inform Assoc.* 2000; 7(3):313-23.
12. McCray AT. Better access to information about clinical trials. *Ann Intern Med.* 2000; 133(8):609-14.
13. McCray AT. Digital library research and application. *Stud Health Technol Inform.* 2000; 76:51-62.
14. McCray AT. Improving access to healthcare information: the Lister Hill National Center for Biomedical Communications. *MD Comput.* 2000; 17(2):29-34.
15. McCray AT, Gallagher ME. Principles for digital library development. *Communications of the ACM* 2001; 44(5):49-54.
16. Lederberg J, McCray AT. 'Ome sweet 'omics – A genealogical treasury of words. *The Scientist*, April 2, 2001; 8.
17. McCray AT. An upper level ontology for the biomedical domain. *Comp Funct Genom* 2003; 4:80-4.
18. Ammenwerth E, Wolff AC, Knaup P, Ulmer H, Skonetzki S, van Bommel JH, McCray AT, Haux R, Kulikowski C. Developing and evaluating criteria to help reviewers of biomedical informatics manuscripts: A case report. *J Am Med Inform Assoc.* 2003;10:512-4.
19. Mitchell JA, McCray AT, Bodenreider O. From phenotype to genotype: Issues in navigating the available information resources. *Methods Inf Med* 2003; 42:557-63.
20. Bodenreider O, McCray AT. Exploring semantic groups through visual approaches. *Journal of Biomedical Informatics* 2003;36(6):414-432.
21. Mitchell JA, Fun J, McCray AT. Design of Genetics Home Reference: A new NLM consumer health resource. *J Am Med Inform Assoc* 2004;11(6):439-447.
22. Lomax J, McCray AT. Mapping the Gene Ontology into the Unified Medical Language System. *Comp Funct Genom* 2004; 354-61.
23. McCray AT. Promoting Health Literacy. *J Am Med Inform Assoc* 2005;12:152-163.
24. McCray AT. Conceptualizing the world: Lessons from history. *J Biomed Inform* 2006; 39(3):267-73.
25. Fomous C, Mitchell JA, McCray AT. Genetics Home Reference: helping patients understand the role of genetics in health and disease. *Community Genetics* 2006;9:247-8.

C. Research Support

Federal employee from January 1986 – January 2005

5283138-01 (PI:McCray)

3/1/2007 – 2/28/2008

Autism Consortium, LLC

Integration and Standardization of Autism Consortium Data

The major goal of this project is to ensure that Autism Consortium research efforts constitute a sustainable, collaborative research effort across phenotypes and multiple measurement modalities for lasting use by the Consortium and the greater developmental medicine research community.