

CURRICULUM VITAE AND BIBLIOGRAPHY

September 2005

NAME: Elmer Victor Bernstam, M.D., M.S.E., M.S., F.A.C.P.

PRESENT TITLE: Assistant Professor

ADDRESS: School of Health Information Sciences
7000 Fannin, Suite 600 (30)

BIRTHDATE: February 23, 1970

CITIZENSHIP: U.S.A.

UNDERGRADUATE EDUCATION:

June 1992 Dual Degree Program (B.S.E. and B.S.)
Bachelor of Science in Engineering (B.S.E. *Magna Cum Laude*)
Computer Engineering
University of Michigan College of Engineering
and
June 1992 Bachelor of Science (B.S. with Distinction)
Dual majors in Biomedical Sciences and Psychology
University of Michigan College of Literature, Science and the
Art

GRADUATE EDUCATION:

June 1995 Medical Doctorate (M.D.)
Integrated Medical-Premedical (INTEFLEX) program
University of Michigan Medical School
August 1999 Master of Science in Engineering (M.S.E.)
Computer Science and Engineering,
University of Michigan College of Engineering
Sept. 1999- National Library of Medicine Fellow, Medical Information
Sciences
Oct. 2001 Department of Internal Medicine, Stanford University Medical
Center Research: Clinical practice guidelines (InterMed
project)
Cost-benefit analysis in health care
Information retrieval
Master of Science Degree 2001

POSTGRADUATE TRAINING:

June 1995 - St. Joseph Mercy Hospital
June 1998 Ann Arbor, MI
Sept. 1999 - Stanford University Medical Center
Oct. 2001 Stanford, CA

ACADEMIC APPOINTMENTS:

2002-Present Faculty
W. M. Keck Center for Computational Biology
University of Texas Health Science Center at Houston
Houston, TX

ACADEMIC APPOINTMENTS: (cont'd)

2001-Present Assistant Professor
School of Health Information Sciences
University of Texas Health Science Center at Houston
Houston, TX

2001-Present Assistant Professor of Medicine
Department of General Internal Medicine
The University of Texas Medical School
Houston, Texas

HOSPITAL APPOINTMENTS: Memorial Hermann Hospital
Harris County Hospital District

LICENSURE: Michigan (J917251) and Texas (L6787)

CERTIFICATION: August 1998 American Board of Internal Medicine

PROFESSIONAL

ORGANIZATIONS: American College of Physicians (ACP)
American Medical Informatics Association (AMIA)

HONORS AND AWARDS: 2005 John P. McGovern Teaching Award
2004 Fellow American College of Physicians (ACP)
2002 NASA Summer Faculty Fellow
2002-2004 Elected Chair of the SHIS Faculty Governance
Organization

SERVICE ON THE UNIVERSITY OF TEXAS-HOUSTON HEALTH SCIENCE CENTER COMMITTEES:

2002-Present Head, Clinical Informatics Focus Area, School of Health Information Sciences
School of Health Information Sciences

1. Curriculum
2. Executive
3. Co-supervisor of IT Support (2003-present)
4. Co-supervisor of IT Development (2005-present)
5. Scholarship/Teaching Incentive
6. Faculty Search (Standing) (2003-present)
7. Space (2004-present)
8. Admissions (2005 – present)
9. Applied track planning (2005-present)
10. Incentive plan review (2002)
11. Strategic planning (2002)

University-Level Committees

1. IT Infrastructure
2. Awards (2003-present)
3. Faculty Development Leave (2003-present)
4. Inter-Faculty Council (IFC, 2003-present)
5. Chair, IFC Faculty Status, Rights and Responsibilities sub-committee (2004-present)
6. Nominating
7. Translational Research Center Planning (2005-present)

SERVICE ON THE UNIVERSITY OF TEXAS-HOUSTON MEDICAL SCHOOL COMMITTEES:

2004-Present Continuing Medical Education
2005-Present Computerized Physician Order Entry
2004-Present Bioinformatics Faculty Search Committee

SPONSORSHIP OF CANDIDATES FOR POSTGRADUATE DEGREE :

1. Jorge R. Herskovic, MD – Evaluation of link analysis algorithms in biomedical information retrieval (committee chair)
2. Sarah E. Edmonson, MD – Exceptions to clinical practice guidelines (committee chair)
3. Kimberly A. Smith-Aiken, MS – Veterinary informatics (committee chair)
4. Muhammad Walji, MS – Consumer informatics and persuasive messages
5. Zhong Xie, MS – Usability evaluation of biomedical systems
6. Rohan Bhavane – Pulmonary drug delivery using novel liposomal delivery systems
7. Adol E. Esquivel, MD, MS – TBD

MS (Research):

1. Len Tanaka, MD – Overcoming citation lag link for analysis algorithms in biomedical information retrieval.
2. J. Travis Gossey, MD – TBD
3. David Richards – TBD

MS (Professional/Applied):

Ebony Bailey – Project management for clinical trials.

CURRENT TEACHING RESPONSIBILITIES:

2002-Present Introduction to Health Informatics (HI 5300) (designed and taught)
2002-Present Consumer Informatics (HI 6308) (designed and taught)
2002-Present Research Seminar (HI 7150). Invited and scheduled local and visiting speakers.
2002-2005 Directed Studies/Resident rotations
March 2002 Health Informatics Short Course
Sept. 2002 Health Informatics Short Course (designed and served as course director)

CURRENT GRANT SUPPORT:

1. Using citation data to improve retrieval from MEDLINE
PI: Elmer V. Bernstam
Amount: \$486,000
Dates: 7/1/04 – 6/30/07
Funding agency: NIH/NLM (1 K22 LM 008306-01)
2. Evaluation of ranking algorithms for information retrieval (Keck Center Fellowship)
PI: Elmer V. Bernstam / Jorge R. Herskovic
Amount: \$25,000
Dates: 1/1/05 – 12/31/06
Funding agency: Gulf Coast Consortium for Computational and Structural Biology
Stipend recipient: Jorge R. Herskovic, MD

CURRENT GRANT SUPPORT: (cont'd)

3. Medical letter content for decision support at the point of care.

PI: Elmer V. Bernstam
Amount: \$67,700
Dates: 6/1/04 – 5/31/06
Funding agency: The Medical Letter

4. Survey of Veterinary Electronic Medical Records

PI: Elmer V. Bernstam / Kimberly Smith
Amount: \$2,300
Dates: 1/1/04 – 12/31/06
Funding agency: Texas Veterinary Medical Foundation

PAST GRANT SUPPORT:

1. Validation of quality criteria for health information on the World Wide Web

PI: Elmer V. Bernstam
Amount: \$98,637
Dates: 9/1/03 – 8/30/04
Funding agency: Robert Wood Johnson Foundation, Health-e-Technologies Initiative

2. Disaster Relief and Emergency Medical Services (DREAMS™)

PI: James H. Duke
Amount: 20% effort
Dates: 12/1/01 – 12/31/03
Funding agency: US Congress direct appropriation

3. NASA Johnson Space Center/Wyle Life Sciences

PI: Elmer V. Bernstam
Amount: 40% effort
Dates: 6/1/03 – 9/30/03
Funding agency: NASA

4. NASA Johnson Space Center Summer Faculty Fellowship Program

PI: Elmer V. Bernstam
Amount: \$12,000
Dates: 4/1/02 – 9/30/02
Funding agency: NASA

PUBLICATIONS:

Peer Reviewed Posters and Abstracts

1. Walji M, Johnson-Throop K, Johnson T, **Bernstam EV**, Zhang J. Proceedings of the AMIA Fall Symposium 2005, *in press*.
2. **Bernstam EV**, Herskovic JR, Meric-Bernstam F. Using citation analysis to ease information overload in oncology. Proceedings of the American Society of Clinical Oncology 41st Annual Meeting, (abstract 6036), 2005.
3. Lund GC, Stones J, **Bernstam EV**. Readability of electronic responses of clinicians to consumer's perinatal health care questions. Proceedings of the American Academy of Pediatrics Annual Conference, *in press*, 2004.
4. Sagaram S, Walji M, Meric F, **Bernstam EV**. Cancer-related complementary and alternative medicine (CAM) on the web. Proceedings of the American Society of Clinical Oncology 39th Annual Meeting , 20:553 (abstract 2226), 2003.
5. Tindall RD, Casscells SW, Sailors RM, **Bernstam EV**, Galloway CS, Duke JH. Saving lives in real-time: a pre-hospital telementoring case. Proceedings of the AMIA Fall Symposium p. 1179, 2002.
6. **Bernstam EV**, Kamvar SD, Meric F, Dugan JM, Chang JT, Chizek SC, Stave C, Troyanskaya OG and Fagan LM. Oncology Patient Interface to MEDLINE. Proceedings of the American Society of Clinical Oncology 37th Annual Meeting 20:244a (abstract 974), 2001.
7. Meric F, **Bernstam EV**, Mirza NQ, Hunt KK, Ames FC, Ross MI, Kuerer HM, Pollock RE, Musen MA and Singletary SE. Breast Cancer on the World Wide Web: Determinants of Web Site Popularity. Proceedings of the American Society of Clinical Oncology 37th Annual Meeting 20:39b (abstract 1904), 2001.
8. **Bernstam EV**, Ash N, Peleg M, Tu S, Shortliffe EH, Greenes RA. Preliminary evaluation of a guideline classification system. Proceedings of the AMIA Fall Symposium pp. 863, 2001.
9. Phillips RC, **Bernstam EV**, Mork P, Lober WB, Karras BT. Modification of GEM to incorporate changes in a classification scheme. Proceedings of the AMIA Fall Symposium pp. 994, 2001.
10. Meric F, **Bernstam EV**, Mirza NQ, Musen MA. Quality and accuracy of breast cancer information on the World Wide Web. 24th Annual San Antonio Breast Cancer Symposium December 10-13, 2001.
11. **Bernstam E**, Troyanskaya O, Chang J. Medline Query-by-Example. (2000) Biomedical Computation at Stanford Conference. October 28, 2000. Stanford, California. [Won best poster in category prize]

Peer Reviewed Papers

1. **Bernstam EV**, Herskovic JR, Aphinyanaphongs Y, Aliferis CF, Sriram MG, Hersh WR. Using citation data to improve retrieval from MEDLINE. J Am Med Inf Ass, *in press*.
2. Herskovic JR, **Bernstam EV**. Using incomplete citation data for MEDLINE results ranking. Proceedings of the AMIA Fall Symposium 2005, *in press*.
3. **Bernstam EV**, Sagaram S, Walji M, Johnson CW, Meric-Bernstam F. Usability of quality measures for online health information: can commonly used technical quality criteria be reliably assessed? Int J Med Inf 2005, 74:7-8; pp. 675-83.

4. Walji M, Sagaram S, Meric-Bernstam, F, Johnson CW, **Bernstam EV**. Searching for cancer-related information online: unintended retrieval of complementary and alternative medicine information. *Int J Med Inf* 2005, 74:1; pp. 685-93.
5. **Bernstam EV**, Shelton DM, Walji M, Meric-Bernstam F. Instruments to assess the quality of health information on the World Wide Web: what can our patients actually use? *Int J Med Inf* 2005 Jan; 74:1, pp. 13-9.
6. Walji M, Sagaram S, Sagaram D, Meric-Bernstam F, Johnson C, Mirza NQ, **Bernstam EV**. Efficacy of quality criteria to identify potentially harmful information: a cross-sectional survey of complementary and alternative medicine websites. *J Med Internet Res* 2004, June, 29; 6(2): e21
7. Sagaram S, Walji M, Meric-Bernstam F, Johnson C, **Bernstam EV**. Inter-observer agreement for quality measures applied to online health information. *MedInfo* 2004, pp. 1308-12.
8. Tang Z, Zhang J, Johnson TR, **Bernstam EV**, Tindall D. Integrating task analysis in software usability evaluation: A case study. *Proceedings of the Human Factors and Ergonomics Society 48th Annual Meeting* 2004, pp. 1741-5.
9. Walji M, Sagaram S, Meric-Bernstam F, Johnson C, **Bernstam EV**. Cancer-related complementary and alternative medicine online: factors affecting information retrieval. *MedInfo* 2004, pp. 1318-22. [Won bronze medal]
10. Sagaram S, Walji M, **Bernstam EV**. Evaluating the prevalence, content and readability of complementary and alternative medicine (CAM) web pages on the Internet. *Proceedings of the AMIA Fall Symposium* 2002, pp. 672-6.
11. Michea Y, Pancheri K, Gong Y, **Bernstam EV**. Availability of online communication technology on diabetes web sites: comparing Chinese, English and Spanish web sites. *Proceedings of the AMIA Fall Symposium* 2002, pp. 523-7.
12. Meric F, **Bernstam EV**, Mirza NQ, Hunt KK, Ames FC, Ross MI, Kuerer HM, Pollock RE, Musen MA, Singletary SE. Breast Cancer on the World Wide Web: A Cross-sectional survey of Information Quality and Web Site Popularity. *BMJ*, 324:577-581, 2002.
13. Peleg M, Boxwala AA, **Bernstam EV**, Tu SW, Greenes RA, Shortliffe EH. Sharable Representation of Clinical Guidelines in GLIF: Relationship to the Arden Syntax. *Journal of Biomedical Informatics*, 34:3, 170-181, 2001.
14. **Bernstam EV**. Medline Query-by-Example (QBE) *Proceedings of the AMIA Fall Symposium* pp. 47-52, 2001.
15. **Bernstam EV**, Ash N, Peleg M, Tu S, Boxwala AA, Mork P Shortliffe EH, Greenes RA. Guideline classification to assist modeling, authoring, implementation and retrieval. *Proceedings of the AMIA Fall Symposium* pp. 66-70, 2000.
16. **Bernstam EV**, Strasberg HR, Rubin DL. Cost-Benefit Analysis of Computer-based Patient Records with Regard to their Use in Colon-Cancer Screening. *Asia Pacific Medical Informatics Conference*. September 28-9, 2000. Hong Kong, China.
17. Peleg, M, Boxwala AA, Ogunyemi O, Zeng Q, Tu SW, Lacson R, **Bernstam E**, Ash N, Mork P, Ohno-Machado L, Shortliffe EH, Greenes RA. GLIF3: The evolution of a guideline representation. *Proceedings of the AMIA Fall Symposium* pp. 645-9, 2000.

18. Deininger RA, **Bernstam EV**. (1993) Journal of American Water Works Assn, 85: 35
19. Deininger RA, Clark RM, Hess AF and **Bernstam EV** (1992) Journal of American Water Works Assn, 84: 48-52.

Invited Publications and Presentations

1. **Bernstam EV**, Strasberg HR, McKibbin KA and Aphinyanaphongs Y. Clinical knowledge: moving beyond relevance to importance. Panel presented at the AMIA Fall Symposium 2005, *in press*.
2. **Bernstam EV**. Using citation data to improve retrieval from Medline. Invited podium presentation, UT-HSC at Houston Research Day. November 19, 2004. Houston, TX. [One of 10 podium presentations selected from UT-HSC faculty]
3. **Bernstam EV**. Validation of Quality Criteria for Health Information on the World Wide Web. Robert Wood Johnson Foundation, Health-e-Technologies Initiative Grantee meeting. October 5 – October 8, 2004. Boston, MA.
4. **Bernstam EV**. Consumer informatics research at the Texas Medical Center. IMIA Consumer Informatics Working Group invited presentation. September 8, 2004. San Francisco, CA.
5. **Bernstam EV**, Meric-Bernstam F. Evaluating the quality of health information on the Web. Robert Wood Johnson Foundation, Health-E-Technologies Initiative. Health-e-Bytes, Spring 2004 edition. Available at: http://www.hetinitiative.org/sub-resources/health_e-bytes/20040503-health_e-bytes.html
6. **Bernstam EV**. Medline QBE (Query-by-Example) Invited Research Seminar. Department of Biomedical Informatics, Vanderbilt University. April 28, 2004. Nashville, TN.
7. **Bernstam EV**. Consumer Informatics. Invited presentation. Cardeo Conference. February 13, 2004. Houston, TX.
8. **Bernstam EV**. Validation of Quality Criteria for Health Information on the World Wide Web. Robert Wood Johnson Foundation, Health-e-Technologies Initiative Grantee meeting. September 30 – October 2, 2003. San Francisco, CA.
9. **Bernstam EV**. Biomedical Informatics. May 14, 2003. SAP Labs North America, Palo Alto, CA.
10. Meric F, **Bernstam EV**. Breast cancer on the World Wide Web. Breast Diseases, A Yearbook Quarterly (2003), 14:1, pp. 20-3.
11. **Bernstam EV**. Chronic Cough in Immunocompetent Adults. MD Vista Journal of Medicine. <http://www.mdvista.com>, 2001.
12. Elkin P, Peleg M, Lacson R, **Bernstam E**, Tu S, Boxwala A, Greenes R, Shortliffe EH. Toward the Standardization of Electronic Guidelines. (2000) *MD Computing*, 17:6, pp. 39-44.

Book Chapters

1. **Bernstam EV**, Meric-Bernstam F. Quality and accuracy of online health information. Chapter in: Whitten, P., Kreps, G., & Eastin, M. (Eds.) (2006, In-progress). Advances in Cancer Online Information Services. Cresskill, NJ: Hampton Press.
2. **Bernstam EV**, Meric-Bernstam F. Reliability and evaluation of online health information. Chapter in: Hakim, L. (Ed.) (2006, In-progress). Web Mobile-Based Applications for Healthcare Management. Idea Group press.

Other Publications and Presentations

1. **Bernstam EV**, Smith JW. Clinical practice guidelines as educational tools: Knowledge dissemination in clinical medicine. Presented at the Advances in Learning and Teaching Day 2002. Houston, TX. February 14, 2002.
2. **Bernstam EV**, Craig CP, Rader K, Mazzeo R. Liver abscess with foreign body as a cause of fever of unknown origin, case report and literature review. American College of Physicians, Michigan Chapter, Abstract. Traverse City, MI. September 1997.
3. Deininger RA, Lai KL, **Bernstam EV**, Mieske H, Sanford L, Skadsen J, Clark R, Rossman L. (1993) Am. Water Works Assn Proceedings of Annual Conference. June 6 - 10, 1993. San Antonio, TX. p. 75 – 82.
5. Deininger RA, Lee BH, **Bernstam EV**, Slawecki T. (1990) NATO advanced Research Workshop on Computer-Aided Support Systems for Water Resources Research and Management. September 23-28, 1990. Lisbon, Portugal.