BIOGRAPHICAL SKETCH

Provide the following information for the key personnel in the order listed for Form Page 2.
Follow the sample format for each person. **DO NOT EXCEED FOUR PAGES.**

NAME	POSITION TITLE
Russ B. Altman	Professor of Genetics, Bioengineering, & Medicine (and of Computer Science, by courtesy)

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
Harvard College	A.B.	1983	Biochemistry & Molecular Biology
Stanford University Medical School	Ph.D.	1989	Medical Information Sciences
Stanford University Medical School	M.D.	1990	Medicine

A. Positions and Honors.

RESEARCH AND/OR PROFESSIONAL EXPERIENCE

1982 Undergraduate Research Assistant. Supervisor: Prof. William N. Lipscomb, Nobel Laureate Harvard Department of Chemistry
1982-1983 Undergraduate Research Assistant. Supervisor: Prof. Stephen C. Harrison, Harvard Department of Biochemistry and Molecular Biology
1984-1988 Graduate Student Research Assistant. Supervisor: Prof. Bruce G. Buchanan, Stanford Dept. of Computer Sci
1989-1992 Research Assistant, Post-Doctoral (part time). Supervisor: Prof. Oleg Jardetzky, Stanford Magnetic Resonance Laboratory
1990-1992 Intern and Resident, Stanford University Medical School
1992 Assistant Professor of Medicine, Stanford University Medical School
1993 Assistant Professor of Computer Science, Stanford University Medical School, by courtesy
1993-1997 Member, Executive Steering Committee, San Diego Supercomputer Center
1994-1995 Organizing Committee, 2nd and 3rd International Conference of Intelligent Systems for Molecular Biology
1996- Organizing Committee, Pacific Symposium on Biocomputing
1996 Founding Board of Directors, International Society for Computational Biology (ISCB), and Chairman, Publications Committee
1997 Molecular Science Thrust Leader, National Partnership for Advanced Computer Infrastructure
1999 Associate Professor of Medicine (and Computer Science, by courtesy) with tenure, Stanford University Medical School
2000-2002 President, International Society for Computational Biology
2001 Associate Professor of Genetics & Medicine (and Computer Science, by courtesy) with tenure, Stanford University Medical School
2004 Professor of Genetics, Bioengineering, & Medicine (and Computer Science, by courtesy)

HONORS AND AWARDS

1983 Phi Beta Kappa, Harvard College Chapter
1983 Summa Cum Laude, Harvard College
1983 NIH Medical Scientist Training Program pre-doctoral fellowship at Stanford
1987 Departmental Ph.D. oral exams passed "with high distinction"
1991 Howard Hughes Fellowship for Physicians
1993 Charles E. Culpeper Scholarship in Medical Science
1996 National Science Foundation CAREER Award
1997 U.S. Presidential Early Career Award for Scientists and Engineers (NIH)
1998 Western Society for Clinical Investigation, Annual Young Investigator Award
1998 Fellow, American College of Medical Informatics
1999 Fellow, American College of Physicians
2000 Stanford Graduate Teaching Award

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

Bagley, SC, Altman, RB, "Characterizing the microenvironment surrounding protein sites." Protein Science, 4(4) p. 622-635, 1995.

Gerstein, MB, Altman, RB, "Average Core Structures and Variability Measures for Protein Families. Application to the Immunoglobins." Journal of Molecular Biology 251(4) p. 161-175, 1995.

Fink, DL, Chen, RO, Noller, HF, Altman, RB, "Computational methods for defining the allowed conformational space of 16S rRNA based on chemical footprinting data." RNA 2(9), p. 851-866, 1996.

Chen, CC, Singh, JP, Altman, RB, "The Hierarchical Organization of Molecular Structure Computation." Journal of Computational Biology 5(3) p. 409-422, 1998.

Chen, C.C., Singh, J.P., Altman, R.B., "Using imperfect secondary structure predictions to improve molecular structure computations." Bioinformatics 15(1) p. 53-65, 1999.

Wei, L, Huang, ES, Altman, RB, "Are Predicted Structures Good Enough to Preserve Functional Sites?" Structure 7 p. 643-650, 1999.

Abernethy, N, Wu, JJ, Hewett, M, Altman, RB, "SOPHIA: A Flexible, Web-Based Knowledge Server." IEEE Intelligent Systems and Their Applications 14(4):79-85, 1999.

Altman, RB, Bada, M, Chai, XJ, Carillo, MW Chen, RO, Abernethy, NF. "RiboWeb: An Ontology-Based System for Collaborative Molecular Biology." IEEE Intelligent Systems and Their Applications 14(5):68-76, 1999.

Bada, MA, Altman, RB. "Computational Modeling of Structured Experimental Data." In Methods in Enzymology, 317(A) p. 470 – 491, 2000.

Joseph, S., Whirl, M.L., Kondo, D., Noller, H.F., Altman, R.B. "Calculation of the relative geometry of tRNAs in the ribosome from directed hydroxyl-radical probing data." RNA 6:220-232, 2000.

Waugh A, Gendron P, Altman R, Brown JW, Case D, Gautheret D, Harvey SC, Leontis N, Westbrook J, Westhof E, Zuker M, Major F. RNAML: a standard syntax for exchanging RNA information. RNA. 2002 Jun;8(6):707-17.

Troyanskaya OG, Garber ME, Brown PO, Botstein D, Altman RB. Nonparametric methods for identifying differentially expressed genes in microarray data. Bioinformatics. 2002 Nov;18(11):1454-61.

Chang JT, Schutze H, Altman RB. Creating an online dictionary of abbreviations from MEDLINE. J Am Med Inform Assoc. 2002 Nov-Dec;9(6):612-20

Yeh I, Karp PD, Noy NF, Altman RB. Knowledge acquisition, consistency checking and concurrency control for Gene Ontology (GO). Bioinformatics. 2003 Jan 22;19(2):241-8.

Troyanskaya OG, Dolinski K, Owen AB, Altman RB, Botstein D. A Bayesian framework for combining heterogeneous data sources for gene function prediction (in Saccharomyces cerevisiae). Proc Natl Acad Sci U S A. 2003 Jul 8;100(14):8348-53. Epub 2003 Jun 25.

Banatao DR, Altman RB, Klein TE. Microenvironment analysis and identification of magnesium binding sites in RNA. Nucleic Acids Res. 2003 Aug 1;31(15):4450-60.

Raychaudhuri S, Chang JT, Imam F, Altman RB. The computational analysis of scientific literature to define and recognize gene expression clusters. Nucleic Acids Res. 2003 Aug 1;31(15):4553-60.

Liu S, Altman RB. Large scale study of protein domain distribution in the context of alternative splicing. Nucleic Acids Res. 2003 Aug 15;31(16):4828-35.

Gabashvili IS, Whirl-Carrillo M, Bada M, Banatao DR, Altman RB. Ribosomal dynamics inferred from variations in experimental measurements. RNA. 2003 Nov;9(11):1301-7.

Dugan JM, Altman RB Using surface envelopes for discrimination of molecular models. Protein Sci. 2004 Jan;13(1):15-24.

Chang JT, Schutze H, Altman RB. GAPSCORE: finding gene and protein names one word at a time. Bioinformatics. 2004 Jan 22;20(2):216-25.

Liu Y, Liu XS, Wei L, Altman RB, Batzoglou S. Eukaryotic regulatory element conservation analysis and identification using comparative genomics. Genome Res. 2004 Mar;14(3):451-8.

Yeh I, Hanekamp T, Tsoka S, Karp PD, Altman RB. Computational analysis of Plasmodium falciparum metabolism: organizing genomic information to facilitate drug discovery. Genome Res. 2004 May;14(5):917-24. Epub 2004 Apr 12.

Lin Z, Owen AB, Altman RB. Genetics. Genomic research and human subject privacy. Science. 2004 Jul 9;305(5681):183.