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
Eddy, Sean R.	Alvin Goldfarb Distinguished Professor HHMI Assistant Investigator

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
California Institute of Technology, Pasadena, CA	BS	1986	Biology
University of Colorado at Boulder, Boulder, CO	PhD	1991	Molecular Biology

A. Positions and Honors.

Positions and Employment
1991-1992	Postdoctoral Fellow, NeXstar Pharmaceuticals, Boulder CO.
1992-1995	Postdoctoral Fellow (w/ R. Durbin, J. Sulston), MRC-LMB, Cambridge, UK.
1995-2000	Assistant Professor of Genetics, Washington University, St. Louis, Missouri
2000-2001	Alvin Goldfarb Professor of Computational Biology, Washington University
2000-	Associate Professor of Genetics, Washington University
2000-	Adjunct Professor of Computer Science, Washington University
2000-	Adjunct Professor of Biomedical Engineering, Washington University
2000-	Assistant Investigator, Howard Hughes Medical Institute
2001-	Alvin Goldfarb Distinguished Professor of Computational Biology, Washington University

Professional Activities (selected):
1998-2000	Program Committee, Intelligent Systems in Molecular Biology conference
2000-	BioMedCentral Bioinformatics subject advisor
2001-2003	National Academy of Sciences committee on community standards for publication
2001-	Director, Washington University Genome Analysis Training Program (NIH NHGRI funded)
2001 -	NIH NHGRI Genome Resources and Sequencing Priorities committee
2002-	Fellow of the Academy of Science of St. Louis
2002-	Nucleic Acids Research editorial board
2002-	Public Library of Science editorial board

Honors.
1991	U. of Colorado Graduate Student Research and Creative Work Award
1997	Eli Lilly Biochemistry Academic Contacts Committee Award

B. **Selected peer-reviewed publications (in chronological order).**
(Publications selected from 35 peer-reviewed publications):

1. Eddy SR, Durbin R. RNA sequence analysis using covariance models. Nucl Acids Res 1994; 22:2079–2088.
2. Lowe TM, Eddy SR. tRNAscan-SE: a program for improved detection of transfer RNA genes in genomic sequence. Nucl Acids Res 1997; 25:955–964.
3. The C. elegans Genome Sequencing Consortium. Genome sequence of the nematode *C. elegan*s: a platform for investigating biology. Science 1998;282:2012-2018.
4. Rivas E, Eddy SR. A dynamic programming algorithm for RNA structure prediction including pseu-doknots. J Mol Biol 1999; 285:2053-2068.
5. Lowe TM, Eddy SR. A computational screen for methylation guide snoRNAs in yeast. Science 1999;283:1168-1171.
6. Rivas E, Eddy SR. The language of RNA: A formal grammar that includes pseudoknots. Bioinfor-matics 2000; 6: 334-340.
7. Omer AD, Lowe TM, Russell AG, Ebhardt H, Eddy SR, Dennis PP. Homologs of small nucleolar RNAs in Archaea. Science 2000;288:517-522.
8. Rivas E, Eddy SR. Secondary structure alone is generally not statistically significant for the detection of noncoding RNAs. Bioinformatics 2000;16:573-585.
9. International Human Genome Sequencing Consortium. Initial sequencing and analysis of the human genome. Nature 2001;409:860-921.
10. Jones SJ, Riddle DL, Pouzyrev AT, Velculescu VE, Hillier L, Eddy SR, Stricklin SL, Baillie DL, Waterston R, Marra MA. Changes in gene expression associated with developmental arrest and longevity in Caenorhabditis elegans. Genome Res 2001;11:1346-1352.
11. Rivas E, Klein RJ, Jones TA, Eddy SR. Computational identification of noncoding RNAs in E. coli by comparative genomics. Current Biol 2001;11:1369-1373.
12. Dowell RD, Jokerst RM, Day A, Eddy SR, Stein L. The Distributed Annotation System. BMC Bioinformatics 2001;2:7.
13. Rivas E, Eddy SR. Noncoding RNA detection using comparative sequence analysis. BMC Bioinformatics 2001;2:8.
14. Speckmann W, Li ZH, Lowe TM, Eddy SR, Terns RM, Terns MP. Archael guide RNAs function in rRNA modification in the eukaryotic nucleus. Current Biol 2002:12:199-203.
15. Zmasek CM, Eddy SR. RIO: Analyzing proteomes by automated phylogenomics using resampled inference of orthologs. BMC Bioinformatics 2002;3:14.
16. Klein RJ, Misulovin Z, Eddy SR. Non-coding RNA genes identified in AT-rich hyperthermophiles. Proc Natl Acad Sci USA 2002;99:7542-7547.
17. Eddy SR. A memory-efficient dynamic programming algorithm for optimal alignment of a sequence to an RNA secondary structure. MC Bioinformatics 2002;3:18.
18. Bao Z, Eddy SR. Automated de novo identification of repeat sequence families in sequenced genomes. Genome Res 2002;12:1269-1276.
19. Mouse Genome Sequencing Consortium. Initial sequencing and comparative analysis of the mouse genome. Nature 2002;420:520-562.
20. Jiang N, Bao Z, Zhang X, Eddy SR, McCouch SR, Wessler SR. An active DNA transposon family in rice. Nature 2002;421:163-167.
21. McCutcheon JP, Eddy SR. Computational identification of non-coding RNAs in Saccharomyces cerevisiae by comparative genomics. Nucl Acids Res 2003;31:4119-4128.
22. Hillier LW et al. The DNA sequence of human chromosome 7. Nature 2003;424:157-164.
23. Klein RJ, Eddy SR. RSEARCH: Finding homologs of single structured RNA sequences. BMC Bioinformatics 2003; 4:44.

● Principal Investigator/Program Director (Last, first, middle):