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Biocomplexity Faculty Search Committee C/O Professor Rob de Ruyter van Steveninck Biocomplexity Institute Swain Hall West 117 Bloomington, IN 47405-7105

To Whom It May Concern:

Dr. Vincent VanBuren has asked me for a recommendation letter for an Assistant Professor of Computational Biology position, and I am very pleased to write very positively. I can comment favorably both on his interactions with others and on his productivity in science.

Dr. VanBuren has been a postdoctoral fellow in the Laboratory here for about 1.5 years, and has done an outstanding job. This was not surprising, because he had already demonstrated originality, resourcefulness, and a wide grasp of biology and bioinformatics in his thesis work. Starting with his initial interview and seminar here, it was clear that he has an unusual feeling not only for standard structural molecular biology and biochemical data but also for dynamic modeling of processes. Experts in that field often produce complex theoretical papers that are very difficult to apply; in contrast, the formulation and model derivation that Dr. VanBuren did as a graduate student produced a highly useful first model and explanation of features of microtubule assembly and energetics (his Proc. Natl. Acad. Sci. USA paper; number 3 in his bibliography).

During his stay here, Dr. VanBuren dived into complex computational problems associated with large-scale definition and expression analyses of an essentially full complement of mouse genes. His published work thus far has included the identification and annotation of a large set of mouse genes (number 4 in his bibiliography), as well as the computer-aided design of dependable oligonucleotide probes specific for each gene in the genome. Currently he has turned his attention to the problem of how to translate signal strength in microarray analyses into quantitative assessments of levels of transcription. He is making excellent progress with that project, which is one of the studies that he proposes to continue in an independent position.

In addition to his published and ongoing research here, the clarity of Dr. VanBuren's thinking is apparent in his description of his future research plan. It succinctly lays out the current utility of

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computational methods in biology and describes a program for the next phase of his career. The program is ambitious, but given his proven ability and effectiveness, it should be feasible.

Let me add that Dr. VanBuren is invariably polite, good-natured, softspoken, and matter-of-fact in all his interactions with others. This has facilitated his work both on his own and in team efforts. He does not advertise himself; but he is not reticent, and stands up well in discussions. All in all, I consider him an exceptional scientist with a broad, proven background. I recommend him for a position as an independent investigator without reservation.

Sincerely yours,

David Schlessinger, Ph.D.

Chief, Laboratory of Genetics

David Schlessing