WRIGHT STATE
UNIVERSITY

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December 15, 2004

Biocomplexity Faculty Search Committee,
Prof. Rob de Ruyter van Steveninck,
Department of Physics,
Indiana University,
Swain Hall West 117,
Bloomington IN, 47405-7105

Dear Dr. de Ruyter van Steveninck,

It is my great pleasure to write this letter of recommendation for Tatiana Karpinets. I have known Tatiana for over 2 years while she worked as my post-doctoral associate between 2002 and 2004. She was in fact the first post-doctoral scientist I employed. The project area was bioinformatics support for toxicogenomics.

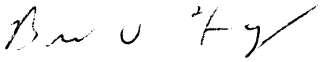
She proved to be a very productive member of our team, possessing a great deal of energy. The team I refer to is a collaboration between Wright State University and Wright Patterson Air Force Base, and includes 7 scientists and several students focusing on developing new approaches to toxicity prediction using genomic, proteomic, and metabolomic technologies. I initially assigned her the task of analyzing a set of Affymetrix gene chip expression data obtained from rat liver cells at multiple time points following exposure to a toxin. As with most bioinformatics projects, the task is both to organize and to interpret the data. Regarding organization, she created tools in Excel and Matlab to categorize, analyze, and view the data in many different ways. Regarding interpretation, she created a database in Microsoft Access culled from numerous literature references. This database greatly facilitates biological understanding of the gene chip experiments and has been published.

Inspired by the global picture of interacting pathways in toxic response obtained from the gene chip experiments, she independently initiated a project on cancer initiation. This project is an attempt to pull together many themes in cancer development and create a framework of the various interacting biological pathways. The work at this point is entirely theoretical, but the model she created and published seems to me to be a worthwhile candidate for experimental testing. Cancer research is an obvious area of strong interest for her.

Her industriousness with respect to finishing any task assigned to her, her aptitude with bioinformatics and quantitative software, and her diligence with respect to staying informed of the current published literature are the equal of any scientist I have worked with, post-doctoral or beyond. Her written English, while always understandable, has

occasional grammatical errors and awkward sentences. She works very well in a team setting as well as having the creativity to develop and pursue new ideas. Among post-docs I have known, I would rank her in the top 10%. I very highly recommend her for any research position focusing on biology or computational biology.

Sincerely,



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