

# IOWA STATE UNIVERSITY

OF SCIENCE AND TECHNOLOGY

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Biocomplexity Faculty Search Committee,  
c/o Prof. Rob de Ruyter van Steveninck,  
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To the Search Committee:

I am pleased to write in support of Pavel Baranov's application for a faculty position in your department. For the past three years, I have collaborated with Pavel and his postdoctoral mentor, John Atkins.

Pavel worked with members of my lab on a bioinformatics project, the aim of which was to identify novel examples of translational recoding. Because recoding is frequently used to regulate viral gene expression, we surveyed eukaryotic retrovirus-like elements (retrotransposons) that were mined from the genome sequences of model organisms. In particular, we searched for evidence of recoding used to express retrotransposon *pol* genes (e.g. -1 frameshifting, stop codon suppression). Through this survey, we identified what appears to be a novel form of translational recoding that may involve translational hopping; we are now excitedly designing experiments to test whether translational hopping is, in fact, used for *pol* expression by some retrotransposons. The results of our survey appeared in *RNA* (9:1430) and I anticipate a second publication with Pavel will appear in the coming year on the presumed translational hopping mechanism.

Pavel has been an ideal collaborator – insightful and quick to respond to our questions. It is clear that he is an expert on mechanisms translation and very well-versed in bioinformatic approaches. This uncommon expertise in 'wet' and 'dry' biology makes me confident that he will bring new insights into the biological questions he tackles. Although most of our collaboration was by phone and email, I also had the opportunity to work directly with Pavel for several days. The experience was thoroughly enjoyable, and I am confident that he will make a great colleague. I urge you to give his application serious consideration.

Please let me know if I can provide further information.

Sincerely, 

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