Dear Leslie Loew [Editor-in-Chief],

Enclosed is a manuscript, entitled “Statistical Inference for Nanopore Sequencing with a Biased Random Walk Model”, to be considered for publication as a Letter in Biophysical Journal.

Recent experimental efforts have focused on achieving precise molecular control of DNA translocation inside the nanopore as a prerequisite to accurate sequencing. In this manuscript, we demonstrate an alternative statistical method of achieving high accuracy sequence reads, even in the presence of stochastic molecular motion. Our results suggest that stochastic motion need not be a critical barrier to accuracy, and can be overcome with parallel reads an appropriate inference scheme. We believe these findings will be of interest to the readers of Biophysical Journal.

We declare that this manuscript is original, has not been published before and is not currently being considered for publication elsewhere. All authors have approved this manuscript and agree with its submission to Biophysical Journal.

We hope you find our manuscript suitable for publication and look forward to hearing from you.

Sincerely,

Kevin Emmett

Department of Physics

Columbia University