

Dear Editors,

We submit this manuscript entitled "Spatially explicit model of the efficiency of the lymphocyte diaspora in influenza-infected lung reveals thresholds on chemokine directed migration" for consideration of publication in PLOS ONE. Our paper implements an agent-based model of bronchial influenza infection and the subsequent T cell response using new empirical values of chemokine secretion. The paper shows that chemokine levels have a limited yet important role in directing T cell migration and that the spatial effects of chemokine diffusion can actually hinder T cell search in rapidly spreading viruses. We feel this work will be of interest to investigators modeling the immune response for the ultimate purpose of improving vaccine design.

This work has not been published elsewhere, and is complementary to a recent publication from our group (H Mitchell, D Levin, et al. J Virol 2011;85(2):1125-1135).

In review we have noticed that our bibliography does not use annotated journal names, which seem to be the standard for PLOS ONE. We have *not* changed our bibliography as of yet as it was generated automatically using the Mendeley Desktop suite. If this is an issue, we would be happy to return and reconstruct the references manually.

All authors have read and approved the revised manuscript.

Respectfully yours,

Drew Levin

Stephanie Forrest

Soumya Banerjee

Candice Clay

Melanie Moses

Frederick Koster