Reviewer’s report

Title: Large serological survey showing cocirculation of Ebola and Marburg viruses in Gabonese bat populations, and a high seroprevalence of both viruses in Rousettus aegyptiacus

Version: 6 Date: 30 July 2009

Reviewer: A. Townsend Peterson

Reviewer’s report:

Major Compulsory Revisions

-- We are going round and round this issue of Microchiroptera and vouchers. I find it painful to hear that a huge sample of bats like this would be developed, but no vouchers would be saved. I simply find that irresponsible, and I find it unconscionable as credible science. I hope that the authors, in the future, will consider these points. That the authors added the explanatory caveat as to their sampling and the reason for lack of vouchers/IDs is the best remedy at this stage. HOWEVER, not reporting the data? No way. Need to re-add those data and results back into the manuscript ... indeed, this is a MUST.

Minor Essential Revisions

-- The authors’ response regarding addition of the GenBank numbers is nothing short of silly. It takes 1-2 lines to provide those numbers, and it is no way irresponsible to do so. Rather, publishing a paper that talks about some sequence data BUT DOES NOT SAY WHICH GENBANK RECORDS are being discussed is highly irresponsible. Just add them into the Methods section, WITH a comment that they have already been published.

-- I would also suggest using fewer subheadings in the Results.

-- A bit disingenuous to talk about the 15% diversity previously observed among East Africa Marburg isolates. Within non-RAVN and within RAVN isolates, diversity is quite a bit lower, and these sequences would probably be pretty interesting. But just stating that the East African isolates are diverse is not completely true.

-- Top of P14 -- saying "Rousettus and/or other Microchiroptera speceis" sounds like Rousettus is a microchiropteran genus. Not true.

Discretionary Revisions

-- Should put some thought into what the cave tie means in Rousettus. Does this mean that Rousettus that live in caves have higher prevalences, versus other Rousettus that live outside, which have lower prevalences? Or could sick Rousettus just go and hang out in the caves? This point may be worthy of some discussion.
Level of interest: An article of outstanding merit and interest in its field

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.