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Dear Peter,

Thanks for sending me your masterful "data sheet". I share your distaste for both "retraviruses" and "oncornaviruses"; it seems to me the latter can be avoided by the simpler and widely-used "RNA tumor viruses." I might favor "ribodeoxyviruses" over "retraviruses" were it not for the implication that the viruses contain both functional RNA and DNA. "Retra" is not only not harmonious; it implies that the viruses are operating weirdly and backwards. In this case, it is the virologists who were backwards. "Ambiviruses" has unfortunate sexual connotations and is ridiculous anyway. Why not abandon the idea of incorporating RNA-directed DNA synthesis into the family name, and, instead, honor Rous with the name Rousviruses (or rousviruses?). When I first encountered Howard's use of this word, I felt that it created unnecessary confusion with RSV. But why not abandon RSV (we generally have, to avoid semantic problems with B77, etc.) in favor of avian sarcoma virus (ASV)? (Of course, this would also mean substituting ALV for RAV in your proposal.) Leon also like this solution and will doubtless write to you about it himself.

I have a few suggestions about the data sheet. In 2.1.1.10, perhaps it should be noted that homologies have not been detected between B and C type, between RNA tumor viruses and lentiviruses, and between C types af certain animals (e.g., FeLV and RD/CCC viruses). 2.1.1.12, should state that "4S tRNA and 5S RNA" occur free and bound to 70S RNA. The phrase "with low tm" is somewhat ambiguous and perhaps could be restated (e.g., a heterogeneous group which dissociates from subunits of 70S RNA at relatively low temperatures, etc.). Perhaps the primer should be identified as a species of tryp tRNA, since its acceptance of methionine is paradoxical. The cellular origin of RNA's discussed in this section should probably be more explicitly stated. You might consider noting that 18 and 28S RNA and cellular DNA can also be found in virus particles.

In 2.1.2.5., it might be fairer to note that "several enzymes, probably cellular in origin, have been reported to be associated with virus particles (e.g., endonuclease, etc....)". I'm not sure the evidence warrants the speculation about RNAse H in 2.1.2.6. Perhaps sensitivity to X-ray should be noted in 2.2. 2.3.3.2., should reflect changes suggested for 2.1.1.12. At some point, perhaps in 2.4., the issue of intracytoplasmic A particles as precursors to B particles should be presented. In the larger view you have provided, the need to put MMTV in a separate genus

seems somewhat frail; certainly the taxonomic criteria for the type B genus should be provided on page 14. It seems to me that mutants, both conditionals and deletions, should be mentioned somewhere, perhaps in section 4. The classification of the REV's is not totally comfortable, but I don't have any suggestions that wouldn't be unnecessarily fragmenting. It might be wise to include a statement about the possiblity of subspecies of MMTV. What is the origin of the letter D for Mason-Pfizer virus?

I found the letter from Lewoff very entertaining.

Best regards,

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HEV/es