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Dr. Peter K. Vogt
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USC School of Medicine
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Los Angeles, CA 90033

Dear Peter:

I write at last about the proposed nomenclature for retrovirus "oncogenes"; please accept my apologies for the delay. My tardiness undoubtedly reflects the fact that I have little enthusiasm for any of the proposals, yet have none better to propose. I fear that we are about to certify an awkward albatross - to this day, few of the designtions proposed in the Coffin-Varmus scheme have become second nature to me: I wish we could tie the scheme more directly to the names of the viruses, in order to achieve ease of recognition, but I see no uniform way to do this and still adhere to the three letter constraint. I am also troubled by the formal taxonomic issue: we are treating this scheme as if it described genetic alleles - which it clearly does not (as Dave Baltimore and several others pointed out in earlier correspondence).

I have found a repeated need for generic terms to represent oncogenes and proto-oncogenes. I suspect that oncogenes will survive, whatever we do, but I do not relish the change to c-onc (cell oncogene) with all that that implies. What do you think? I find proto-oncogene less committal, and less reminiscent of the "oncogene hypothesis" with its rather ill-conceived relationship to reality as we now understand it.

As for some of the more controversial designations: I prefer myc to mac; I question the wisdom of doubling the nomenclature for erb (ie., a and b), particularly at this early time; something has to be done about mas - it seems too far removed from the other FeSV designations, which include the allusion to "feline"; I suggest rev rather than rel (even Temin didn't recognize the latter...); and I certainly would not object to changing fps, as several others have suggested in earlier correspondence.

Steve Martin is correct (as usual): the superscripts are a horrendous problem. Could we take this opportunity to change the entire system to parenthetical designations that follow the Mr of the proteins?

In my heart of hearts, I think I would still prefer a more casual system in which a generic designation (such as onc) would be followed by a parenthetical designation of the particular virus in question; thus, onc(MCV), onc(AEV), etc. But

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I find no support for this in the available correspondence and therefore subscribe to the proposal before the house.

With best regards,

J. Michael Bishop, M.D.
Professor
Microbiology and Immunology

JMB:jm