DEAR ALEX:

DO JIMENEZ-MORALES AND LIANG TALK ABOUT WHRE THEY GOT THE AMINO ACID FREQUENCIES? ARE THEY JUST THE STEADY STATE OF THE MARKOV CHAIN DEFINED BY Q?

I would not be surprised to learn that this is a deductive consequence of the rate matrix being symmetric. There is no state such that its incoming rates far outweigh its outgoing rates.

HOWEVER. Consider a state with ENORMOUS incoming and outgoing rates. Barely any time would be spent in this state!

I don't see why the rate matrix would be symmetric. If mutation INTO a cysteine is slow, then mutation OUT of a cysteine should be fast.

My new goal is just to be able to write an e-mail to these guys expressing new information, being able to say for sure what it is I need, and that it was never provided.