

Re: viruses:a new biology?

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On Feb 15, 12:14 pm, Prashant <prashant.soh...@xxxxxxxxxx> wrote:

i started thinking on this when i recalled the reasons why mars is at present, unfit for life: unsuitable atmosphere, no water, etc. But my argument is that the presence of water and oxygen is nodoubt essential for the survival of "our" kind of biological species. there may be some other kind of biology, which can sustain without water and oxygen!
In other words: chemicals like carbohydrates, proteins, dna etc are the building blocks of all species on earth. Who knows, some other building blocks may comprise a completely new species--in fact, a species which we wont be able to fit in our scheme of biological knowledge!
....and i believe we've already encountered such a species: viruses. True, they have DNA or RNA, but still its a fact that they dont behave the way "our biology" predicts they should.
what do you say? are viruses really so-called Biological aliens, with a completely different origin?

I don't think so. I don't think behavior would identify a biological alien, since on our world behavior evvolves faster than biochemistry (generally). Any behavioral similarity is likely to be a behavioral analog, not a a behavioral homolog.

This would be especially true for parasites like viruses. In order to be a parasite, the preparasite would have to fool the hosts autoimmune system. It couldn't do that unless there was already a similarity in biochemistry. A similarity in biochemistry would be required as a sort of preadaption. Therefore, I don't think viruses are phylogenetic aliens.

Currently, viruses can't live without full cells supporting them. The cells perform all the metabolic functions for them, as well performing all the functions necessary for reproducing their DNA or RNA. Furthermore, the viruses do have the same biochemistry as the full cells. They use the same amino acids, and the same nucleic acids.

Consider a higher level of physiology. A dolphin is not a fish just because it swims like a fish. When you look at the anatomy and physiology of a dolphin, it looks very different from a fish. That is

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what makes the dolphin an "alien fish." Or as we call them, aquatic mammals.