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It is impossible to make scientific claims unless one is guided by scientific principles. In fact, as far back as 1957, J. W. Beard, a leading retrovirologist of the day, discussing the isolation and analysis of particles wrote: "Although this has resulted in considerable success in some instances, there remain numerous unresolved problems in the general field, as well as outstanding omissions in the systematic use of the principles and procedures of well-recognised applicability. Fundamentally, the scheme of approach, as well illustrated by that devised and rigorously tested in investigations of viral agents, is relatively simple. This consists in (1) isolation of the particles of interest; (2) recovery (purification) of the particles in a given preparation that are homogeneous with respect to particle kind; (3) identification of the particles, and (4) analysis and characterisation of the particles for the physical, chemical, or biological properties desired"[1]. The "rules" employed by HIV/AIDS researchers, that is, detection of a protein, p24, OR an enzyme, reverse transcriptase, do not satisfy any scientific principle proving isolation of a viral particle and indeed defy common sense. If detection of p24 by an antibody is "HIV isolation" then why is the detection of the protein b-HCG in blood or urine (pregnancy test) not proof of placental isolation? The same argument can be advanced for reporting the measurement of cardiac enzymes in cases of suspected myocardial infarction as "isolation" of heart.

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continuum

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5. "But if one put together three or four papers, all the data are there and have been published for years".
Where are these three or four papers? Where is even one paper where there is electron micrographic evidence revealing particles of any shape or form at the density of 1.16 gm/ml, the density that defines retroviral particles, let alone retrovirus-like particles with "No apparent differences in physical appearances" as Sinoussi and Chermann wrote in 1973 or, as Beard much earlier wrote, "homogeneous with respect to particle kind"?

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8. "HIV particles look different" from "naturally existing viruses".
In the scientific literature there is no data which permits one to distinguish on the basis of appearances between endogenous (natural) and exogenous retroviruses. "Retroviruses are enveloped viruses with a diameter of 100-120 nm budding at cellular membranes. Cell released virions [individual virus particles] contain condensed inner bodies (cores) and are studded with projections (spikes, knobs)"[8]. The particles are further categorised according to "site of core assembly (preformed in the cytoplasm or formed during the budding process at the plasma [cell] membrane); shape and size of surface protrusions (spike- or knob- like); presence or absence of electron-lucent space between envelope and core in immature particles, and shape and position of cores in mature particles". There are three subfamilies of retroviruses (Oncovirinae, Lentivirinae, and Spumavirinae). The particles of the subfamily Oncovirinae are in turn subdivided into four genera, type A intracisternal and intracytoplasmic particles, and type B, type C and type D particles[9].

As far as "HIV particles look different" is concerned, in cultures of tissues from AIDS patients one can see a "zoo" of particles with varying morphologies. For example:

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this theory wrote: "Natural history studies of the prevalence of the gs [gag] antigen [protein] in virus-free laboratory mice revealed gs antigens in high titers in the hematopoietic tissues of individuals of most mice strains"[24]. One year later Robin Weiss wrote: "The idea that normal cells of chickens might contain avian tumor virus genomes first arose from the observation that normal embryonic tissues of some "leukosis-free" chicken strains possessed an antigen which was indistinguishable from the group-specific (gs) antigen of avian tumor viruses"[25]. The p17/18 and p24 proteins of "HIV" are said to be coded by its gag gene. The evidence that the p18 and p24 proteins (and antibodies) are non-specific is overwhelming and can be illustrated by a few examples:

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of "HIV" are caused by "HIV" and not by impurities?
(d) since no EM has been published showing virus-like particles in the material which bands at 1.16 gm/ml, how can one know that such particles, pure or impure, are present at the retroviral density?

14. "...grow HIV isolates..."
How can one grow HIV isolates when the virus has not been isolated?

15. "HIV's genetic material, on the other hand, can be purified".
A critical analysis of the HIV literature shows that by "HIV genome" is meant nothing more than the selection of part of the RNA from cultures which bands at a density of 1.16 gm/ml. Since no evidence exists for the presence of retroviral particles at this density, it is impossible to say that such RNA belongs to HIV or even to a virus-like particle.

16. "Gene cloning techniques allow researchers to extract the viral genes found in HIV-infected cells".
This cannot be the case unless one first has nucleic acids which have been proven to belong to a unique retroviral particle, which can be done only by isolating the particle.

17. "When the complete set of genes is re-introduced into healthy human cells in culture, the cells produce HIV particles".
In the vast HIV literature there is not one paper with such evidence.

18. "It would clearly be unethical to inject these particles into humans to see if they caused AIDS".
If it is impossible to obtain such evidence, or to have an animal model, how can the claim that the cause of AIDS is HIV be justified?

19. "However, experiments with purified SIV, the monkey equivalent of HIV, have proved that the pure retrovirus causes the selective loss of CD4 cells resulting in an AIDS-like disease".
(a) The evidence for SIV isolation and "purified" SIV is no better than that for HIV;
(b) In most cases SIV, like HIV, has been "isolated" from cultures with the human leukaemic cell line H9 (HUT78) a cell line which Gallo claims to have shown contains the HTLV-1 genome, a "human retrovirus"[41].
(c) The effects obtained when animals are injected with "SIV" have nothing to do with the AIDS diseases. In fact, in many cases, they may represent nothing more than graft vs host effects.
(d) Even if the diseases were similar or identical to AIDS they may be the result of impurities in the "SIV preparations" and not to SIV.

20. "Moreover, three American laboratory workers have been infected with purified HIV..."
How is it possible to prove this when the "insistence that the experiment start with pure particles" is "unobtainable"?

21. "By 1993, all three had developed low CD4 counts and one had been diagnosed with PCP, proving the link between HIV, immune suppression and AIDS".
Even if these individuals were proven to have repeatedly low CD4 counts and to have PCP diagnosed by lung biopsy and not by the non-specific methods presently used, it does not mean that these abnormalities are caused by HIV. The existence of low CD4 counts and the AIDS-like diseases are nothing new and are not specific to HIV. Furthermore, a superficial glance at the AIDS literature shows that no relationship exists between CD4 cell counts and the syndrome[42]. Indeed, in those at risk, low T4 cell counts frequently antedate "infection" with HIV which can be interpreted as low T4 cell counts being the "cause of HIV" and not vice versa.

CONCLUSION

Retrovirus-like particles including particles with morphologies attributed to HIV are ubiquitous. The first absolutely necessary but not sufficient step in proving that the particles represent a retrovirus is to show that in sucrose gradients the particles band at the retroviral density of 1.16 gm/ml. The first absolutely necessary but not sufficient step in claiming the existence of a retroviral protein and genome is to prove that each belongs to one and the same type of retrovirus-like particle such as type C, type D or Lentiviruses.
No such evidence exists for the "HIV" particles, proteins are nucleic acids.

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