

Saules  
Brookline

SARLES

February 25, 1959

Dear Bill:

I hope you are enjoying your insular visit as much as you deserve or better. I trust what I am going to suggest in this letter won't diminish that enjoyment.

Petterson (ref. in enclosure) has made some interesting observations on the Ni content of air filtered from high altitude stations at Mauna Loa. The Hawaiians offer ~~many~~ obvious advantages for a variety of studies of phenomena at moderate altitudes relatively safe from contamination from ground dust, etc. It occurred to me that it might be well worth while to make careful microbiological surveys of similar samples, and that this might be fun for someone like yourself. Among other things, such a survey would help to test the presumed cleanliness of the air at the altitude of these collections. They also have some bearing on the possibility of transport of spores (at low density) to very high altitudes. Perhaps the ~~XXXXXX~~ literature already contains enough relevant data-- Roger Stanier promises to look into this, though it may ~~not~~ not have been such a popular exercise since Pasteur's time. If not, where would it be more fun to do?

Nature, ~~XXXXX~~ Jan. 31 1959 has a paper on 'nitrogen in New Zealand snows' (ic!) that may not be unrelated-- viz. some of this nitrogen might be of meteoritic (or volcanic) origin, though its proposition of oceanic provenance is not unreasonable. One should have wanted some Na, Cl analyses to check this point. Anyhow this does suggest the suitability of high altitude snowfalls from a site like Hawaii for parallel investigations on microbial, N, Na, Ni content. I'm not going to cook the meal but just try to whet your appetite. (Of course this survey should be matched by a corresponding one in the high Alps and Rockies to check to role of nearby oceans!)

SARLES, W

If you think anyone of this might be fun during your visit, I suggest you contact Newton Morton whose brother-in-law is a meteorologist who does some work on Mauna Loa (Colby Foss.) Petterson also refers (see encl.) to Professor Steiger, perhaps even more aptly. (Don't take too seriously the imputed hypothesis of collection of meteoritic ~~microbes~~ microbes.)

Enjoy yourself-- and let's hear from you. Do visit us if you pass through SFO on your way home. Our phone is (lab) DA-3-2441, or (home) DA-3-3816.

Best wishes,

Joshua Lederberg

Ever: "insolent"  
Petterson letter