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May 10, 1997 ? should this be 1998

[redacted]
[redacted] Bacterial Diseases Division
USAMRIID
1425 Porter St.
Ft. Detrick, MD 21702-5011

Dear [redacted]

My colleagues and I would like to extend our thanks and appreciation to both you and Dr. Ivins for the opportunity to work at USAMRIID. Dr. Ivins, [redacted] were very helpful and cooperative in facilitating our studies as well as providing excellent technical assistance. Their efforts made our stay at USAMRIID both pleasant and highly productive. In particular, our discussions with Dr. Ivins provided valuable insights which will enable us to better define and develop our technology.

The data generated in these studies serves to clarify and validate the results which we have seen in our model systems (see attachments). We were able to block growth of both strains of B. *anthracis* with emulsion incorporated media (Table 1). We also were successful in reducing both Vollum and Ames spore counts by 95% (as assessed by CFU of viable organisms). These reductions were observed at spore concentrations up to 1 X 10^6/ml (Figure 1), and were seen even in conditions which limited germination (room temperature incubation). Decreased numbers of spores also were identified microscopically in the media after treatment. In contrast, no reduction in counts was noted with an initial spore inoculum of 1 X 10^8/ml (Figure 2). These conditions probably overwhelm the emulsion given that the concentration of spores is approaching the concentration of lipid vesicles. However, extremely high spore concentrations may alter the effect of the lipid in other ways and we are designing experiments with inhibitors of germination used at lower spore densities to clarify this result.

We were pleased with this outcome and the personal interaction that produced them. Given the non-toxic nature of these emulsions, we feel that they may have a role in the decontamination and treatment of agents such as anthrax and alphavirus. We look forward to future collaborative efforts with Dr. Ivins and his laboratory staff. With the diverse nature of our respective programs, we believe that a cooperative approach will serve to accelerate the development of these compounds.

Sincerely,

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