



THE ROCKEFELLER UNIVERSITY

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May 8, 1990

Dr. Lederberg
President
The Rockefeller University

Dear Dr. Lederberg:

As soon as we can improve our detection efficiency for high molecular mass (low velocity) ions we will try to measure virus particles. At present, our detector runs out of steam at about m/z 150,000-200,000.

SENSITIVITY: We normally load a total of 0.1-1.0 pmole of protein onto the probe tip, but actually bombard only 1% of the total area of the probe tip - so that only 1-10 fmole of sample is actually consumed to obtain a mass spectrum. Our sensitivity is presently limited by our sample handling techniques (which need to be improved) - we like to work with protein concentration in excess of 10^{-7} M.

MS/MS: We have constructed a second TOF instrument with a two laser system. The second laser will be used to try to induce photo-dissociation of ions in flight.

Thanks again,

Sincerely,

Brian Chait

