

NATIONAL SCIENCE FOUNDATION ADVISORY COMMITTEE
BIOLOGICAL AND MEDICAL SCIENCES

PROPOSAL RATING SHEET

<u>No.</u>	<u>Title</u>	<u>Investigator</u>	<u>Institution</u>
B-2067	Viral and rickettsial replication in cells	William A. Cassel	Hahnemann Med Col

The reduction of animal-virology to a quantitative basis will only be possible on the basis of studies of the interactions of virus particles with single cells. The ascites tumor cells at one time promised to be the most promising system for this, owing to the ease with which free cell suspensions could be obtained studied and assayed. Puck's more recent work on the clonal cultivation of HeLa cells in tissue culture promises to obsolete the ascites system, but it has not yet been adequately exploited, and a combination of the ascites with tissue-culture systems may well be in the offing. Cassel (Briddy's) preliminary work appear to be most promising, and should be supported. Unfortunately, it is not emphasized what assay methods will be used; in view of the reference to Lwoff et al, these will presumably be plaque-counts on sheets of epithelial cells, along the lines of Dulbecco's proposals. The investment of additional funds for obviously pertinent equipment to support a project already well in progress seems a desirable objective for the NSF.

I am not ~~exactly~~ acquainted with Cassel personally, but have followed his papers on bacterial/cytology with close interest. In a field full of sound and fury, he has seemed to be a rather level headed fellow who did not go nearly as far beyond his observations as most of his colleagues. He has subsequently gone over to virus work under the able mentorship of Professor Briddy and would appear to be making a competent start.

Score 1
From 5 (low) to 1 (high)

Signature _____