

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-3081	Mutational origin of halophilic bacteria	William L. Flannery	Baylor U

The proposal is for a problem of fundamental interest, doubtless having been suggested by Allen's recent studies on the mutational basis of thermophily. The investigator appears to be somewhat naive as to the experiments he proposes; to my mind, a preliminary survey to substantiate the possibilities should precede any longer-term investment. The ideas are rather rote, and have to be so long as he has not actually initiated any genetic studies. The previous work of Doudoroff suggests, however, that several complications will arise, the rate of change of ionic strength possibly being as important a factor in bacterial survival as the salt concentration itself. But I have had access to Flannery's review in press, which, together with his previous papers suggest a similar simple-mindedness of approach. However, none else appears to be likely to go into this story, and it might be worthwhile to simply stir up some interest in this important problem. I should think one could make a good start on this kind of work with a minimum of assistance and expense, though the budget presented is not extravagant.

Score 2
From 5 (low) to 1 (high)

Signature _____