

# AMERICAN INSTITUTE OF BIOLOGICAL SCIENCES

Operating under the

NATIONAL RESEARCH COUNCIL

2101 CONSTITUTION AVENUE

WASHINGTON 25, D. C.

TELEPHONE: EXECUTIVE 8100

## COMMITTEE ON HANDBOOK OF BIOLOGICAL DATA

June 12, 1951

Dr. Joshua Lederberg  
Associate Professor of Genetics  
The University of Wisconsin  
Department of Genetics  
Madison 6, Wisconsin

Dear Doctor Lederberg:

This is in belated reply to your letter of April 9. Please accept my apology for the delay. We are very far behind in Handbook correspondence.

In regard to the topic, "Nutrient Requirements of Bacteria," and the coverage desired, I should explain that for all organisms, both plant and animal, we are hoping to get certain standard information, with modifications that may be made necessary in view of the availability or lack of availability of data. Fundamentally, we should like to know the quantity (by weight) of water, oxygen (*in ml*), each of the amino acids or the protein, lipids, carbohydrates, each of the minerals and each of the vitamins made use of per unit of weight of the organism per appropriate time interval, together with the range of temperature permissible in the normal life of the organism and its energy "consumption" in calories. We at once run into necessary modification of this general pattern when it comes to plants grown in nutrient solutions and in such an instance we would be obliged to accept data on the concentrations of the various nutrients offered to the organism ~~as~~ perhaps even more important than the quantity utilized. In your own field, I am sure that other modifications would have to be made in the overall pattern. Our Committee would much appreciate having your views on just what would be practicable.

You understand that we much depend upon the contributor to do the selecting of the organisms upon which data are given. All we can do is to lay before the contributor as a guide in such selection that he

regard the organism as of sufficient importance either scientifically or economically or as typical of its class, to warrant including it. Certainly in the field of bacteriology, clinical importance would have to be added.

In the light of this brief discussion, are you willing to undertake to submit data within this area? If you are, or even if you are not, I would appreciate having your views as to what would be a practicable handling of the problem in this area. I should add that we make rather liberal use of footnotes to tables to indicate method of measurement and any important conditions under which the observations were made, and the effects of deviations from these standard conditions.

Thank you for supplying the names of Dr. B.C.J. Knight and Dr. W. H. Peterson. Would it not be possible for you and Dr. Peterson to collaborate?

Please let me hear from you with any further advice that you feel would be helpful, as we must depend upon just such advice in orienting ourselves toward the special problems in the special areas.

Sincerely yours,



ERRETT C. ALBRITTON  
Editor of the Handbook  
and Executive Secretary  
of the Committee

ECA:bk