

**THE EXPLOSION OF SCIENCE  
FROM MOLECULE  
TO MAN**  
EDITED BY J. Z. YOUNG & TOM MARGERISON



**Biological breakthrough**



Here is the thrill and excitement of the work being done in the world's biology and chemistry laboratories that has brought man to the threshold of the creation of life.

The 10¼" x 13½" pages contain over 400 dramatic photographs (many full-page size) in color and black and white, some magnified 500,000 times, and numerous line drawings, ranging from the building blocks of life to the mechanisms of the mind and the new work being done to combat man's most pressing problems.

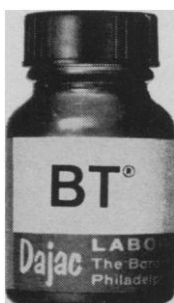
**FROM MOLECULE  
TO MAN**

Edited by J. Z. YOUNG and  
TOM MARGERISON

\$19.95, now at your bookstore

 419 Park Ave. S.,  
New York 10016

**Borden's reagents  
are the finest made.  
Here's one:**



**(We have 299 more.)**

Among the 300 reagents of Borden Chemical's Dajac Laboratories, you will find not only Blue Tetrazolium (BT®), but also INT, Nitro BT® and TNBT. All of these Dajac reagents are the recognized leaders for purity and reliable results in their field.

**Free Catalog:** For complete information on these compounds and our enzyme substrates, fluorescent dyes, and analytical reagents, write for a copy of our current catalog.



Dajac Laboratories  
Borden Chemical, Division of Borden Inc  
Box 9522  
Philadelphia, Pa. 19124



closed early both times. It will be offered again this fall. The intensity of student interest and the effectiveness with which they have sought out and used faculty resources available to them is most impressive. The result of their activity has been to transform the consciousness of the campus with respect to the implications of population growth.

One's estimate of the probability of producing any lasting effect through teaching can vary a good bit and mine is not very optimistic. However, I think it is necessary to behave as if it were greater than zero. Certainly it is greater than the probability of significantly influencing the action of such groups as the Chamber of Commerce, city councils, or the State Lands Commission, at least in southern California.

GROVER C. STEPHENS  
*Department of Organismic Biology,  
University of California,  
Irvine 92664*

#### **NIH: Ethics of Budget Cutting and Retrenchment**

For many years the National Institutes of Health have provided training grants to departments in a large number of universities to support graduate students in the natural and medical sciences. These programs were adopted to decentralize procedures for awarding fellowships to students so as to reduce the need for direct evaluation of applicants by NIH panels and committees. The training grants also aided in the advance of knowledge in the health sciences and have materially contributed to meeting the nation's needs for an increased number of scientists.

The custom of awarding training grants to universities instead of awarding fellowships directly to students has resulted in a transfer of fiscal responsibility. In selecting students and awarding stipends under training grants the universities have had to make a commitment to support the student for the entire period leading to the Ph.D. degree—generally 4 to 6 years. Training grants have generally been awarded for 5 years with a complete review during the fourth year. By this time, however, a university would have continuing commitments to students already admitted, ranging from 1 to 3 years beyond the expiration of the grant and, if letters of acceptance had already

been sent to students admitting them in the fifth year of the grant, its responsibility to them could extend for as long as 4 years beyond the termination of the training grant.

During the current period of retrenchment and budget cuts, many training grants have not been renewed and others have been approved for renewal but have not been funded. This is placing an undue and unfair burden on the universities to provide stipends for the substantial numbers of students to whom they have made continuing commitments. In accepting the principles of the training grant programs, the universities filled their pipelines with graduate students and had to make commitments in good faith extending beyond the period of the grant. The National Institutes of Health are ethically and morally responsible and probably could be held legally responsible for continuing stipends to graduate students already appointed until they complete their degrees.

ELVIN A. KABAT  
*Department of Microbiology,  
Columbia University,  
630 West 168 Street,  
New York 10032*

#### **Is the AAAS Council Facing Its Responsibilities?**

The Council of the AAAS is composed of about 550 delegates from the affiliated societies, the sections, and the state academies. It meets once each year, usually performs routine business, hears committee reports, and adjourns in less than a day. Councillors are asked to come from throughout the nation during the holiday season for such sessions, and frequently the attendance is poor.

This dismal state of the Council operations is in particular contrast to its possibilities. At a time when science is harassed by government and public agencies, the Council could be a major force for defending and encouraging science and its applications for improving human welfare. No other body in existence has such major possibilities. Why are its potentialities virtually untapped?

The main reason is that it is not well organized. About 10 years ago, a major reorganization was attempted, and the basic power of the Council as the governing body of the AAAS was restored.

A Committee on Council Affairs was established which was to meet regularly and organize the Council. The councillors seeking the changes were forced to accept one major and fatal decision, the chairman of the Committee on Council Affairs was to be the president-elect of the AAAS. Most presidents of the AAAS have been excellent choices for their office, but few or none have had experience with the AAAS Council or the time to carry out their duties as chairman of this committee.

If the Council is to assume an active role, the primary step is to allow the Council to choose its own chairman of the Committee on Council Affairs which should meet frequently and act as the executive body between Council meetings. The Council should have numerous active committees with staff help from the AAAS. An excellent organization pattern is offered by the American Chemical Society, whose main office is only one block from the AAAS headquarters. Both its Board and Council have numerous active committees. The bustling crowded corridors of the ACS building are a startling contrast to the staid, quiet corridors of the AAAS building.

The Council in its present form is too large and many of the members attend only one session, if at all. Provision must be made for fewer councillors who would serve minimum terms of 3 years and be removed if absent.

These changes and the proper choice of individuals could make the AAAS Council a great and powerful Parliament of Science capable of voicing the needs, possibilities, and responsibilities of science and scientists. It would be able to face Big Government as an independent critic of government operations in the best traditions of our democracy.

Can this be done? It can. The Council has the power. I have sat through too many dull unproductive Council sessions. Action will be asked at the next Council meeting to bring out the needed changes. I ask councillors who share this vision of an unparalleled opportunity to write to me. This action is independent of the current activities of the Committee on Council Affairs. However, any resolutions offered will be submitted for consideration by its members.

WARD PIGMAN

*New York Medical College,  
Fifth Avenue at 106th Street,  
New York 10029*

10 OCTOBER 1969

## ES-300 SYMPOSIUM

on

# Protein and Peptide Sequencing

Atlantic Coast—latter part of November

Pacific Coast—early December

The Bio-Cal Symposium on Protein and Peptide Sequencing will demonstrate the operation, capabilities and results obtained with the new ES-300 Sequenator.

For dates, locations, and reservations contact Mr. Lou Rigali,  
Bio-Cal Instrument Co., 2400 Wright Avenue,  
Richmond, California 94804. Telephone: (415) 237-4944.

To be assured of a reservation, we suggest you contact  
Mr. Rigali as soon as possible.

**BIOCAL**

*Instrument Co.*