

# THE DEPARTMENT OF THE AMERICAN ASSOCIATION OF COLLEGES OF PHARMACY

## *The Publication Board*

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IF ONE basic field in pharmaceutical education can be said to have been neglected more than another, that field is the biological field. In this field pharmaceutical education has not kept pace with pharmaceutical practice and for that reason biologic assay went to the medically trained man and not to the pharmaceutically trained individual, where it, by the nature of things, belongs. The Commonwealth Study of pharmacy showed physiology to be a basic pharmaceutical science and it took the strong hand of the Director of that study to keep certain members of the advisory committee from eliminating physiology from the pharmaceutical curriculum. The same sentiment was evident in the committee that made the last revision of the Pharmaceutical Syllabus. With the inclusion in the Pharmacopœia of a number of biologic assays and with the whole field of medicine headed in that direction, for the Syllabus Committee to vote against making biologic assay a requirement in the curriculum, was nothing less than a tragedy, it was a pathetic calamity. It was all the more pathetic, not because the Committee did not see the vision, it was done for fear it would add to the expense of teaching in some schools which could not afford it. When a school reaches that point, it better give up trying to give courses in the pharmaceutical sciences and devote its energies to the teaching in elementary bookkeeping and penmanship. It is therefore tremendously refreshing to find a man like Dr. R. A. Deno of the School of Pharmacy of the Medical College of Virginia who is giving thought to the most basic of the basic biological sciences and is actually working out his thought in his own laboratory.

Forty years ago, or at an even later date, pharmacy was an isolated science. A College of Pharmacy was looked upon as a one-subject college. That condition is changed, no longer can we think of pharmacy in the terms of one subject, or in relation to physics and chemistry alone, it must also be thought of in its relation to botany, zoölogy, physiology, pharmacology, biologic assay, pharmacognosy and bacteriology. These subjects are just as rightfully called the pharmaceutical sciences as they are entitled to be called the medical sciences.

Not only the pharmaceutical educator, but the research worker and the practicing drug-gist will appreciate the stress Doctor Deno has placed upon a more basic teaching of biological science in the pharmaceutical curriculum.—RUFUS A. LYMAN, *Editor*.

### THE TEACHING OF BIOLOGY TO PHARMACY STUDENTS.

RICHARD A. DENO.\*

Courses in pharmacy almost always have included instruction in the science of botany. More recently, general work in zoölogy has been required in an increasing number of colleges. This requirement is logical when we consider the rapid development within recent years of gland products and other pharmaceuticals of animal origin, and the present-day emphasis upon courses that are cognate to the work in pharmacy proper and whose nature is biological. At the present time a few schools of pharmacy are requiring a year of biology in place of botany, or of botany and zoölogy. In view of these changes and of the present extensive discussion of the cultural aspects of professional education, it might be well to ask a few specific bio-pharmaceutical questions.

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