

# THE DEPARTMENT OF THE AMERICAN ASSOCIATION OF COLLEGES OF PHARMACY

(I deem it a significant fact that two colleges of pharmacy—the College of Pharmacy of Ohio State University, and the College of Pharmacy of the University of Minnesota—have decided to go to a four-year minimum course. Our three-year minimum course went into effect last September and practically all of the schools of pharmacy still have two-year students in the process of completing courses. Surely the time is not far distant when every college of pharmacy will give serious thought to the advisability of eliminating all below the four-year course. I believe Deans Dye and Wulling are to be congratulated on the steps that their institutions have taken. I am sure that all who are interested in pharmaceutical education will be interested in the following article by Dean Wulling.—C. B. JORDAN, *Editor*.)

## MINNESOTA GOES ON A FOUR-YEAR MINIMUM DEGREE BASIS.

BY FREDERICK J. WULLING.

At the April meeting, the Board of Regents of the University of Minnesota took action to the effect that, after the close of the University year 1928–29, that is June 30, 1929, no degree be granted in Pharmacy for less than four years of College work.

This means that the present four-year course leading to the degree Bachelor of Science in Pharmacy will become the minimum degree course. The degree Pharmaceutical Chemist will not be granted after June, 1929. That degree has heretofore been given for a minimum of three years of technical work in pharmacy. Those who enter next fall (September 1926), may still become applicants for that degree. After that those desiring a degree in pharmacy must complete the present four-year course. No changes will be made in the content of that course. The forty-five academic credits included in the course may be taken as heretofore in the College of Science, Literature and the Arts. The forty-five credits can be completed in one college year. Very likely an arrangement will be made whereby students will be permitted to complete the forty-five academic credits during the first two years of the four-year course concurrently with pharmaceutical work.

The action of the Regents puts no obligation upon students to remain for four years. Students who can meet the general University requirements for admission, may, as heretofore, remain for a lesser number of years than four, but they will not receive degrees. Those who remain long enough to meet the State Law requirements may ask for the usual certificate to the State Board of Pharmacy in case they desire to present themselves for the State Board examinations.

The action of the Regents was taken in conformity with the request of the Pharmacy faculty and of the Minnesota State Pharmaceutical Association. Heretofore the Pharmacy requirements for entrance and graduation taken together were the lowest at the University although the practice of pharmacy is one of the most responsible professions. The recent survey of pharmacy from the functional standpoint, carried out by the Commonwealth Fund under the direction of Dr. W. W. Charters, has clearly pointed out the necessity of a minimum of four years of training as a preparation for the practice of pharmacy. This need was realized years ago by a number of pharmaceutical educators and certain colleges

of pharmacy have offered, for a number of years now, four-year courses. Although these courses were optional, some of the more farsighted students entered upon them and the courses have been growing in popularity of late.

The University Colleges of Chemistry, Mines and Engineering are the only other colleges on the campus who require a minimum of four years of satisfactorily completed work for a degree. The College of Pharmacy is now on an equality with these colleges in that respect. With respect to prerequisite academic requirements, these colleges are two years behind the Colleges of Medicine, Dentistry, Law, Education and Business, the latter colleges requiring an academic preparation of two years in the College of Science, Literature and Arts before they admit their students to technical work. The College of Dentistry has just raised its prerequisite academic requirement from one to two years and in that respect is now on a parity with the other colleges named.

It will be seen, therefore, that while the College of Pharmacy has been advanced in standing to the equal of that of the Colleges of Chemistry, Engineering and Mines, it is still two years behind the Colleges of Medicine, Dentistry, Law, Education and Business, notwithstanding that the professions represented by these colleges carry on no more responsible practice than pharmacy, possibly with the exception of Medicine.

The pharmacists of the State should and no doubt do rejoice at the elevation of pharmaceutical educational standards at the University. By the action of the Regents, the request of the State Association was granted in essential respects and the pharmacists should be and no doubt are satisfied with the action taken. It would be unreasonable for the University to exclude students from courses in pharmacy unless the students completed a full four-year course. No doubt the fact that no degree will be granted for less than the completion of the old established four-year course, will have the effect of increasing the matriculants for that course.

The Minnesota State Pharmaceutical Association, at its last meeting in February, instructed its Legislative Committee to seek an amendment to the present pharmacy law, increasing the two-year prerequisite college requirement to three years. The passage of that amendment at the next legislature will require all students to remain at least three years at the college. They need not remain longer but in that case they would not receive a degree. The proposed amendment is made practically necessary by the raising of the minimum educational standard from two to three years imposed upon the members of the American Association of Colleges of Pharmacy. Many of the member colleges of the Association already offer four-year courses but the College of Pharmacy of the University of Minnesota is one of the first colleges requiring a *minimum* of four years for a degree in pharmacy. By the Regents' action, this College now has advanced the minimum credit requirement for the lowest degree from around two hundred to two hundred and forty-five credits. Forty-five of the credits must be in fields covered by academic subjects. Thirty of these credits are obligatory (rhetoric 10 credits; modern language 10 credits; physics 10 credits) and fifteen elective and may be taken in the College of Science, Literature and Arts or at any other college of equal standing. Junior colleges are being established in various parts of the State. Some are already in operation. These academic

subjects can be completed at such junior colleges so that candidates for the pharmacy degree presenting those completed credits, need to remain only three years at the University in case they prefer to do so.

The action of the Board of Regents does not affect the two higher courses leading to the Master's and Doctor's degrees in Science in Pharmacy. The B. S. course has been and will continue to be a prerequisite to these higher courses.

Students who enter the College in the fall of 1927, may or may not become applicants for the lowest degree, as they choose. In case they become applicants, they could not receive the degree before the spring of 1931.

It may be of interest to pharmacists to learn that the demand for graduates from the four-year course has been constantly increasing of late years, and it is reasonable to believe that the growing competition and stress of life will increase that demand.

The College of Pharmacy was the first, as far as I know, to abolish the title "Graduate in Pharmacy" in 1914 and now abolishes the title "Pharmaceutical Chemist." The collegiate nature of these titles has never been admitted by higher institutions of learning. The degree Bachelor of Science in Pharmacy is a degree of unquestioned collegiate standing.

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(In the following paper Dean LaWall has touched upon a very important subject. The Professor who only knows his own subject is narrow indeed and cannot make the success he would, if his education were broader. The time has come when teachers of pharmaceutical subjects need to be well-trained in the general sciences and have such cultural training as is given by collegiate English, mathematics, modern languages, psychology, economics, history, etc. This leads us toward the requirement of collegiate training as a prerequisite to Schools of Pharmacy. All who enter may not need this training at present, but surely all who intend to become "Teachers" in Schools of Pharmacy need it. Dean LaWall's suggestions for usefulness in everyday life are excellent and all teachers in schools of Pharmacy should be deeply interested in his contribution.—C. B. JORDAN, *Editor.*)

### WHAT SHOULD A PHARMACY COLLEGE PROFESSOR KNOW?

BY CHARLES H. LAWALL.\*

In the admirable study of pharmacy which has occupied the attention of a committee working under the expert leadership of Dr. W. W. Charters of the Commonwealth Foundation, and which is now approaching completion, the survey has had for its fundamental objective the answer to the question "What Should a Pharmacist Know?"

The breadth and comprehensiveness of the answer was a surprise, not only to the Director of the study, Dr. Charters, who approached the subject free from the prejudice or bias of one who is closely connected with pharmacy, but it also astonished many who had been identified for many years with the teaching of future pharmacists.

The published report, which may be expected some time during the year, will undoubtedly be a revelation to the majority of those who take the trouble to read it, and will serve as an inspiration for the development of a new era in pharmaceutical education.

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\* Dean, Philadelphia College of Pharmacy and Science.

What a pharmacist should know, therefore is a question to which a complete answer may soon be expected. But when may we expect an answer to the equally important question which has been taken for the title of this present contribution?

Without going into the subject in an argumentative way and with no reference to degrees or even to experience on the part of present professors, let us briefly consider this subject from a common sense and very practical standpoint.

The first thing the professor should know is the difference between education and training. The study of medicine, of pharmacy, of dentistry, of chemistry, of engineering, and other professional subjects, while of educational value, is not education in itself. It is specialized training, and specialized training always tends to destroy perspective and narrow the recipient, so that while he becomes a useful unit in his particular field of work he lacks that intangible something, that composite of indefinable attributes which distinguishes one who is truly educated.

The suggestion, in a committee report several years ago, to include astronomy in the list of cultural subjects of pharmacy, subjected one of our conference members to ridicule from some quarters. Yet, in the main, he was right. Remoteness from practical application should not carry with it a stigma. Pragmatism is the bane of most professional curricula. Nothing is taught that is not intended to be directly useful. Whether it actually is or not is an entirely different question and accounts for the discrepancies between the number of college graduates who take State Board examinations and the number who actually pass, for in this connection comes the age old argument as to who shall decide what is useful and practical in the matter of education.

An educator of national fame a few years ago defined an education as "What a man has left after he has forgotten all that he learned in college." Manifestly, this definition could not be applied to education along professional lines, for the things taught there are taught to be remembered, not to be forgotten.

We cannot measure success in terms of material prosperity alone. Happiness, contentment, the use of leisure to one's own advantage and satisfaction, are factors of undeniable importance in success. To know how to play is just as necessary as to know how to work, and makes the work much easier and better, as a rule.

It is advisable, therefore, for a professor to know more than his own subject if he is to function efficiently as a unit in the scheme of educational progress. One way of attaining this goal is for the Faculty of an institution to have frequent meetings of a certain broad type, different from the ordinary Faculty meetings where purely administrative matters are discussed.

These meetings should be interdepartmental. They should include every member of the instructional corps. There should be social contact of some kind, such as a luncheon or dinner. This should then be followed by the presentation of some scientific or professional subject by the head or a member of one of the departments of instruction. By careful planning the entire field of work may be covered during the course of the College year, and each member of the instructional corps will have had an opportunity to gain an insight into the work of other departments than his own and will have a new perspective of his work—its scope, its opportunities and its needs.

The professor should also know and appreciate more fully his relationships

with the community at large. He should see himself as a necessary factor in the dissemination of scientific information to the public. This may be accomplished in several ways. One of these is by the arranging of popular lectures upon scientific subjects, to be prepared and delivered by those members of the Faculty who are best qualified to serve in this direction. There is in every community a large group of people who are science-hungry, and the satisfying of this hunger by lectures based upon authoritative data and in which the high voltage of ultra-scientific knowledge and terminology have been stepped down to an understandable and correct form, is one of the opportunities for service of which advantage is too seldom taken.

Another very satisfactory method of aiding the community is by the offering of scientific advisory service to the newspapers of the city or town. This should be offered in such a manner that the newspaper publisher or editor may feel free to avail himself of the opportunity without any obligation to reveal the source of the assistance. "Newspaper science" has come to be a term of ridicule or reproach. It is not due to the intention or the desire of the newspapers to deliberately misstate the facts, but to ignorance alone. Newspaper publishers and editors eagerly welcome constructive assistance of this kind. Let our pharmacy colleges offer such assistance and see how quickly it will be accepted and how much good can be accomplished with a very small expenditure of energy.

Still another phase of community helpfulness is illustrated in the numerous opportunities which are available for addressing luncheon clubs, high school assemblies, church clubs, civic organizations, neighborhood gatherings and the like. One fundamental fact must be kept in mind. If a group of this kind is to be of real constructive value, it must subordinate its individuality as much as is humanly possible. "Your druggist is more than a merchant" is a slogan which has a much deeper meaning than appears upon the surface. And so "Your college professor must be more than a teacher" is an equally illuminating sentence if accepted at its true worth.

There is a great opportunity for pharmacy if the pharmacists themselves once realize it, and this opportunity will come more quickly when the teachers in colleges of pharmacy come to a realization of their responsibilities, not only to their alumni and to their students, but to the communities of which they are an integral part. Modern commercial activities are largely directed toward selling people something that they do not want and probably will never need.

Educational activities are principally concerned with selling students something they do not want at present, but will need very much in later life. "Extra" educational activities may be properly directed into the pleasanter and more profitable channels of giving a number of people exactly what they want and at a time when they most want it.

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#### KRESGE FOUNDATION.

Sebastian S. Kresge has established a \$25,000,000 fund for philanthropic and educational purposes.

Only tentative plans have been outlined for the Kresge Foundation's activities so far, but

it is expected that a permanent organization under Mr. Kresge's guidance will soon begin a survey looking toward a definite program of giving financial assistance to educational, charitable and religious purposes and advancements.

U. S. P. EXHIBIT AT A. M. A. CONVENTION, DALLAS, TEX., APRIL 19 TO 23, 1926.

The U. S. P. exhibit at the A. M. A. Convention consisted of drugs, chemicals, preparations and typical prescriptions based upon "Useful Drugs" published by the American Medical Association.



In the background of the exhibit will be seen eighteen prescriptions with all crude drugs, chemicals and preparations involved in their preparation. These prescriptions were prominently displayed with a large copy of each prescription, connected by ribbons to the drugs, their preparations and final use in the prescription.

Samples of all new admissions to U. S. P. X were displayed together with a number of U. S. P. X crude drugs so arranged as to attract attention to the exhibit.

Booklets were distributed calling attention to admissions, changes in title, etc., of U. S. P. X drugs and preparations. Dean C. A. Duncan, of Baylor University School of Pharmacy, Delegate of the AMERICAN PHARMACEUTICAL ASSOCIATION to the American Medical Association had charge of the exhibit with cooperation of Prof. S. Y. Althoff, assisted by senior students of Baylor University School of Pharmacy.

## CORRESPONDENCE

### EXTRACTS FROM LETTERS OF LIFE MEMBERS, A. PH. A.

**F. C. Waterbury.**—"I am delighted to receive the certificate of Life Membership, and I am having it framed and hung in my office.

"I want to assure you that I will be only too glad to assist you in any way possible in the successful termination of the headquarters building."

**W. M. Burton.**—"The certificate of life membership in the AMERICAN PHARMACEUTICAL ASSOCIATION, together with your letter, reached me promptly. I desire to express to the ASSOCIATION, through you, my great appreciation of the honor conferred.

"I feel that one of the great pleasures of my life has been my association with fellow-pharmacists, and now no matter what may happen I shall always be able to keep in touch with them through the reports of the ASSOCIATION."