

that continued until the spring of 1935 when it became the New York University College of Medicine. The college established its own clinic fifty-eight years ago and since that time has treated more than 1,000,000 patients.

This year the college has an enrolment of 499 students and a faculty of 514 men and women. The instructional staff includes 51 full-time teachers and 463 practicing physicians devoting part of their time to teaching at the college. The centennial senior class, which will be graduated this June, consists of 123 young men and women, 92 of whom will become internes in the hospitals of the city.

During the past century 10,900 individuals have been graduated. Dean McEwen pointed out that three out of four students are natives of New York and that one out of every seven doctors in the city is a graduate of the college of medicine.

Among the 10,900 physicians graduated by the college during the past century were Walter Reed, William Crawford Gorgas and Hermann M. Biggs. Such leaders in American medicine as Valentine Mott, John W. Draper, Lewis A. Sayre, Austin Flint, William H. Welch, William Hallock Park and Charles Norris have at different times been members of the faculty.

PHYSICISTS AND NATIONAL DEFENSE

In his report to the annual meeting of the Governing Board of the American Institute of Physics, held on March 15, Dr. Henry A. Barton, director of the institute, estimated that 1,400 physicists, or one out of every four in the United States, are working on problems of national defense. This figure is based on surveys which are not yet completed and is probably a conservative estimate. According to the records of the institute there are from 4,000 to 6,000 physicists in the United States, depending on how a physicist is defined. 4,100 are members of at least one national professional society in physics.

A recent survey of more than 130 universities indicates that, of their total staff of 1,100 professors and instructors of physics, over 100 have recently been called away for official defense research projects. At least another 200 have been named consultants or assigned to full or part-time defense tasks at their home institutions. In addition, some 50 graduate students of physics have dropped their studies to accept defense assignments away from their institutions and another 35 at home.

Aside from these there are approximately 300 physicists in the technical services of the army, navy, air corps and other government departments, mostly full time, and of these at least 250 are at work on problems intimately concerned with national defense.

In industry it is estimated that 2,500 trained physicists are employed, many of them in the research laboratories of large corporations. On the basis of reports received, at least 800 of these have been assigned to new work programs in line with the needs of national defense. Indeed, if all work designed to improve or speed the production of defense materials and products be counted, the number is greater than 800.

Dr. Barton estimates that physicists are laying aside fundamental research and industrial development work and are turning to defense research at the rate of more than a hundred a month. The Civil Service Commission has recently modified regulations to encourage applications from physicists, not enough having been obtained to fill openings in the government service. Industries are applying to the institute for help in expanding their technical staffs, and the institute is unable to find men for them. Defense agencies are already handicapped and are finding it difficult to obtain seriously needed physicist personnel.

Not only is the "supply" of physicists being strained, but the "output" of new physicists is being curtailed. The men who have been called from universities for defense research are often those best fitted to train new research physicists. However, their remaining colleagues, actuated solely by patriotic motives, are generously assuming increased teaching loads, thus enabling the universities to keep up the standards of training offered to students.

Unfortunately, the careers of many students are about to be disrupted by the draft. Most of them are unmarried and of draft age. Unless something can be done to keep these much needed students in the graduate schools, the number of men receiving advanced training in physics will drop to less than half of the recent average of one hundred and thirty per year. What the country needs is to multiply this figure rather than to cut it down. Since a thorough training in physics requires three or four years of graduate study, it is nearly impossible to increase the annual increment of good new physicists. Every effort should be made at least to keep it up.

SCIENTIFIC NOTES AND NEWS

THE meeting on March 20 of the Washington Academy of Sciences was devoted to the presentation of its awards for scientific achievement for 1940 as follows: For the *engineering sciences*, to Harry Diamond, Na-

tional Bureau of Standards, "for his distinguished service in developing radio methods for aircraft navigation and for upper-air meteorological soundings." For the *physical sciences*, to Dr. F. G. Brickwedde,