

college years. Test scores were available for 1100 of the 1300 students included in this study.

Support for the assumption that our samples were reasonably representative comes from a comparison of our findings with other data. There have been scattered reports comparing the students in one field with those in other fields at the same college or university.

TABLE 2

Field of specialization	Median score of recent AB's (from Table 1)	Mean score of college seniors on SSCQT (converted to AGCT scale)
Physical sciences (including chemistry and earth sciences)	130	132
Biological Sciences	126	126
Social Sciences	125	128
Humanities	127	128
Engineering	129	132
Agriculture	124	122
Business and Commerce	124	126
Education	122	118
Total group	126	128

We have examined these reports and have also compared the data with analyses of the score distributions of students graduating with different majors during the past 30 years from the Ohio State University. The recently published analysis¹ of the scores made by

¹A *Summary of Statistics on Selective Service College Qualification Test*. Statistical Report 52-1. Princeton, N. J.: Educational Testing Service (Jan. 22, 1952).

different groups of students taking the Selective Service College Qualification Test makes it possible to compare our data with the scores of the 38,420 college seniors who took the SSCQT during 1951. Average scores for approximately comparable groups are given in Table 2.

The conversion of SSCQT scores to AGCT scores is an approximation; one column gives means and the other medians; the SSCQT sample consisted of a self-selected group of men, whereas our sample consisted of all men and women graduates from a selected list of colleges. Nevertheless, the agreement between the two sets of data, together with the other lines of evidence outlined above, indicates that the scores presented in Table 1 can be accepted as reasonably good estimates of the distributions of ability of students currently being trained in the United States for work in scientific and other fields of specialization. It seems reasonable to accept 126 as a fair estimate of the median score of graduates of colleges and universities. Other Commission data indicate, however, that if all types of degree granting institutions were included the median would be a few—perhaps five—points lower. But changing the estimated median would not affect the field-to-field comparisons. Those are so consistent from one set of data to another that they can be accepted with a good deal of confidence.

In conclusion, those fields which have reputations of requiring abstract and rigorous thinking (e.g., physics, chemistry, law) attract students who are, on the average, superior to those who major in traditionally "easier" subjects (e.g., business and commerce or education). But the distributions all overlap; every field attracts some of the mediocre students; every field attracts some of the brightest.

News and Notes

Scientists in the News

Nathan Birnbaum, associate professor of chemistry, has returned to the City College of New York after a three-year leave of absence, during which he was on active military duty as lieutenant colonel with the Chemical Corps, U. S. Army. Dr. Birnbaum will remain associated with the Chemical Corps as a consultant to the Research and Engineering Command, Army Chemical Center, Md.

Columbia University Engineering School's new Aeronautical Structures Laboratory has added **Bruno A. Boley** to its staff as associate professor of civil engineering. Dr. Boley goes to Columbia from Ohio State University, where he was in charge of the structures curriculum and research in the Department of Aeronautical Engineering.

Elias Cohen has been appointed instructor of pathology at the School of Medicine, University of

Oklahoma, as well as assistant director of the clinical laboratories of the teaching hospital. He will extend the quantitative immunological studies that he was conducting at Rutgers University.

Horace C. Dudley, USN, has been relieved as head of the Allied Sciences Section, Medical Service Corps, by L. A. Barnes. For the past five years, Comdr. Dudley has also been chief of the Biochemistry Division, Naval Medical Research Laboratory, Bethesda, Md. His new assignment is as head of the Radioisotope Laboratory, U. S. Naval Hospital, St. Albans, N. Y.

Howard E. Evans, associate professor in entomology at Kansas State College, has resigned to accept a position at Cornell University, succeeding **J. C. Bradley**, retired (*SCIENCE*, 115, 7 [1952]).

K. P. Ewing, who for 32 years has served as research entomologist with the USDA Cotton Insects

Division, has been chosen to coordinate the cooperative research programs of USDA and various states and other agencies set up to bring the pink bollworm under control. Named as special assistant to the leader of the division, Mr. Ewing will be responsible for all USDA cotton insect surveys and research in Texas and Oklahoma. The Oscar Johnston Cotton Foundation, Memphis, Tenn., is cooperating with the USDA in its efforts to develop more effective pink bollworm control measures, and Mr. Ewing will administer this cooperation as it relates to the Bureau of Entomology and Plant Quarantine.

Harold V. Gaskill has accepted the chairmanship of the Committee on Highway Safety Research of the National Research Council, succeeding **E. R. Hilgard**, dean of graduate studies, Stanford University, who has consented to remain a member of the committee. Dr. Gaskill is dean of the Division of Science and director of the Industrial Sciences Research Institute, Iowa State College, Ames. He is at present on leave in Washington, serving as chief scientist and deputy chief of research and development, Office of Chief of Staff, U. S. Army. **T. W. Forbes**, executive secretary of the committee, has resigned from his position as associate professor of psychology at the University of Hawaii, in order to continue in his present capacity with the committee and to accept the additional appointment as technical director.

Mead Johnson & Company, Evansville, Ind., have appointed **Ben King Harned** executive director of research, with responsibility for all laboratory activities of the company.

Two research chemists of the Corning Glass Works will be awarded John Price Wetherill Medals by The Franklin Institute for their discovery of a new process for manufacturing glass. They are **Harrison P. Hood** and **Martin E. Nordberg**, both of Corning. The Frank P. Brown Medal will be given to **Fred N. Severud**, of New York City, for his engineering accomplishments in the field of building construction; **Cyril Stanley Smith**, professor of metallurgy and director of the Institute for the Study of Metals at the University of Chicago, a former member of the Manhattan Project, will be awarded a Francis J. Clamer Medal for his metallurgical contribution to the development of atomic energy during and since World War II; **Alfred J. Buchi**, of Winterthur, Switzerland, an authority on Diesel engines will receive the George R. Henderson Medal; and **H. Birchard Taylor**, Philadelphia engineer and industrialist, will be awarded an Elliott Cresson Medal. Formal presentation of the medals and awards will take place at the institute's annual Medal Day ceremonies in Franklin Hall Oct. 15.

The David Sarnoff Gold Medal Award will be presented to **A. G. Jensen**, director of Television Research, Bell Telephone Laboratories. The medal, presented each year in recognition of recent technical contributions to the art of television by RCA's Chair-

man of the Board General Sarnoff, was instituted last year, when Otto H. Schade was the first recipient. Mr. Jensen is chairman of the Standards Committee of the Institute of Radio Engineers. In Europe this year, he was awarded the G. A. Hagemann Gold Medal by the Royal Technical College for his contributions to the field of engineering research.

Gretchen Ann Margaret, of the University of Wisconsin Psychology Department, has resigned to take a position in psychiatry with the College of Medicine of the University of Illinois. Professor Margaret went to Wisconsin in 1945 after teaching at Stanford University.

Bastiaan J. D. Meeuse, formerly acting head of the Biochemical Laboratory at Delft, Holland, has joined the staff of the Department of Botany at the University of Washington. Dr. Meeuse will teach plant physiology and plant biochemistry and will continue his research on the biochemistry of polysaccharides.

Douglas Geoffrey Northcott has succeeded **A. G. Walker** in the chair of mathematics in the University of Sheffield. In 1947 he took up a Princeton fellowship, and while in the U. S. he was elected to a research fellowship in St. John's College, Cambridge. Soon after his return to England in 1949 he was appointed a university assistant lecturer at Cambridge, becoming a full university lecturer in 1951 in the geometry school.

William F. O'Connor has been named chairman of the Chemistry Department at Fordham University. Dr. O'Connor went to Fordham in 1947 as an associate professor of chemistry and chairman of the research committee. In 1950 he was appointed director of the Fordham Research Foundation.

H. Neil Richardson, of Syracuse University, has been appointed fellow for 1952-53 in the School of Jerusalem. He will work in the school's archaeological programs at ancient Jericho and Dhiban in the Hashemite Kingdom of the Jordan.

Herschel Roman, professor of botany at the University of Washington, will spend a sabbatical year as a Guggenheim fellow working with Boris Ephrussi at the University of Paris on the genetics of yeast. Before returning to the U. S. in September 1953, Dr. Roman will visit yeast genetics laboratories in Denmark, Sweden, and England, and will also attend the International Genetics Congress in Bellagio, Italy.

Merritt P. Sarles has been appointed associate professor of biology at the Catholic University of America, where he will teach and direct graduate work in parasitology. Dr. Sarles was formerly parasitologist and toxicologist with the Entomological Division, U. S. Industrial Chemicals Co., of Baltimore, Md., and brings to his new position a wide range of experience attained in the Bureau of Animal Industry and Entomology, in the Department of Bacteriology and Parasitology of the University of Chicago, and in the De-

partment of Animal Pathology of the Rockefeller Institute for Medical Research at Princeton, N. J.

Roland B. Scott, head of the Howard University Department of Pediatrics, recently returned from a tour of European pediatric teaching centers in London, Newcastle-upon-Tyne, Birmingham, Manchester, Edinburgh, Stockholm, and Paris. While in London, Dr. Scott gave a guest lecture at the Great Ormond Street Hospital for Sick Children on "Management of Bronchial Asthma in Childhood."

Seton H. Thompson, chief of the Fish and Wildlife Service's Branch of Alaska Fisheries, has been appointed by President Truman as one of the two U. S. members of the International Fisheries Commission. Mr. Thompson succeeds **Milton C. James**, who retired Mar. 13 as assistant director of the Service (SCIENCE, 116, 51 [1952]). Mr. Thompson has been associated with the Fish and Wildlife Service and its predecessor agency, the Bureau of Fisheries, since 1926.

Norman H. Topping, of the U. S. Public Health Service, has been appointed vice president of the University of Pennsylvania in charge of medical affairs, effective Nov. 1. Dr. Topping is associate director of the National Institutes of Health at Bethesda, Md. As medical vice president, Dr. Topping will be the principal administrative officer of the university's whole medical program—the School of Medicine, Graduate School of Medicine, School of Dentistry, School of Veterinary Medicine, School of Nursing Education, School of Auxiliary Medical Services, and the related hospitals and laboratories.

Frits W. Went, professor of plant physiology and head of the Earhart Plant Research Laboratory at the California Institute of Technology, has undertaken a lecture tour through western Europe. In London he will attend the International Horticultural Congress, where he will speak on the control of plant growth. He plans to visit all the major agricultural experimental stations in England, the Netherlands (his birthplace), Denmark, Sweden, Germany, Switzerland, and Belgium. He will confer with other scientists on construction of laboratories similar to Earhart, and will visit the only other similar installation, located in Liège.

Education

Armour Research Foundation of Illinois Institute of Technology has named François J. Olmer, of Celanese Corporation, research physical chemist. Dr. Olmer, a specialist in high polymer physics, came to this country in 1940, shortly after the Nazi invasion of Paris, as a research associate at the University of Missouri. Illinois Tech has promoted the following staff members: John G. Duba (civil engineering), Lewis P. Elbinger (electrical engineering), and Maurice D. Kilbridge (industrial engineering).

The following scientists have joined the Physics Department and Radiation Laboratory staffs of the

University of Pittsburgh: Edward Gerjuoy, of New York University; Jan Yntema, of Princeton; and James McGruer and William Benesch. Dr. Benesch is currently in Liège, where he is working in the laboratories of the Astrophysical Institute, under Marcel Migeotte (SCIENCE, 116, 270 [1952]).

Purdue University has added five members to the teaching and research staff of the Department of Biological Sciences: A. B. Burdick, of the University of Arkansas (genetics); Merwin Moskowitz, of Yale (medical bacteriology and immunochemistry); James M. McFadden, of St. Elizabeth's Hospital (medical pathology); Harold Garner (microbial genetics); and Seymour Benzer, of the Department of Physics, who has been on leave at the University of Paris (biophysics).

In a joint project of the **University of Texas M. D. Anderson Hospital for Cancer Research**, the Hogg Foundation for Mental Hygiene, and the Department of Psychology at the university in Austin, a medical psychology training research program will be started this year at the hospital in Houston. Staff members will include Beatrix Cobb and John I. Wheeler, Jr.

Grants and Fellowships

The **American Society for Metals** has given three cash prizes of \$2000 each for the best teaching in the field of metallurgical engineering in 1951-52. The prizes, to be awarded during the National Metal Congress in Philadelphia, Oct. 20-24, will go to Arthur A. Burr, of Rensselaer Polytechnic Institute; Joseph W. Spretnak, of Ohio State; and Robert D. Stout, of Lehigh.

General Motors Corporation has established a graduate fellowship in electrochemistry at the University of Michigan, which will be offered for the first time in 1952-53. Applicants should write at once to Alfred L. Ferguson, Department of Chemistry, University of Michigan, Ann Arbor.

The **Hematology Research Foundation**, organized in 1943 to provide funds for research on leukemia, Hodgkin's, and other blood diseases, has awarded the Ruth Berger Reader Fellowship to Herbert M. Rubinstein, of Michael Reese Hospital, Chicago. Other grants were made to Robert M. Kark, University of Illinois; I. Davidsohn, Mt. Sinai Hospital; Allen H. Minor, Lenox Hill Hospital, New York; and Howard L. Alt, Northwestern University Medical School.

The **Lasdon Foundation** has made a grant of \$20,000 to Alvin Coburn, director of the Rheumatic Fever Institute, Northwestern University Medical School, for further research in that field. The institute has headquarters in the Municipal Hospital for Contagious Diseases, Chicago, and draws its material from low-income areas.

The **Louis Livingston Seaman Fund**, of the New York Academy of Medicine, has \$1900 available for

research in bacteriology and sanitary science in 1952. Applications from institutions or individuals should be addressed (before *Dec. 1*) to Wilson G. Smillie, 1300 York Ave., New York 21.

In the Laboratories

American Cyanamid Company, Calco Chemical Division, has appointed Ames B. Hettrick manager of the new Engineering and Development Department, which consolidates all engineering and process development functions that were previously part of the Production and Technical departments. Alden R. Loosli will become assistant to the general manager of the division on Jan. 1, and V. E. Wellman will become assistant manager of the Intermediate and Rubber Chemicals Department.

The **H. Fletcher Brown Laboratory** at the University of Delaware will be dedicated Oct. 18 in ceremonies that will include addresses on chemical reaction kinetics by Farrington Daniels, of the University of Wisconsin, and Richard Wilhelm, of Princeton. The addresses will be followed by discussions of research in progress in chemical engineering and chemistry and a tour of the laboratory. All interested scientists are invited to attend.

Chemstrand Corporation has appointed the following chemists to its staff at the Decatur (Ga.) Acrilan plant: Carlyle J. Stehman, William T. Dye, Jr., Arthur B. Beindorff, James W. Stoops, Howard A. Chamberlin, Garnett L. Wade, Jr., and Daniel L. Worth.

General Electric Research Laboratory is beginning a one-year study of long-distance weather migrations and cloud physics for the Office of Naval Research. Irving Langmuir will conduct the research in weather movements, devoting full time to the project. The laboratory study of cloud physics will be conducted by Vincent J. Schaefer and Raymond E. Falconer. The new project has no connection with Project Cirrus, joint weather research program of the Army Signal Corps and ONR.

The **Glenn L. Martin Company** has appointed Howard W. Merrill chief electromechanical engineer and has promoted Giles J. Strickroth, Sanford Hersfield, and Fred B. Haynes, in a reorganization of the Electronics Department. Charles A. Blaney, Jr., formerly production manager, has been made manager of Plant 2, where Martin is building the B-57A bomber for the USAF. George A. Huggins will succeed Mr. Blaney.

Directors of **E. R. Squibb & Sons** and of **Mathieson Chemical Corporation** have adopted a merger agreement that will be submitted to shareholders for approval at special meetings on Sept. 30. Under the terms of the agreement, Mathieson Chemical, which was founded in 1892, will be the surviving corporation. Thomas S. Nichols, Mathieson president, will be president and chairman of the board of the merged

corporation. Squibb will be operated as a separate division and will retain the name and continue the policies and standards of the 94-year-old pharmaceutical house.

Meetings and Elections

A memorial meeting for Franz M. Groedel will be held by the **American College of Cardiology** at the New York Academy of Medicine Oct. 14 at 8:30 P.M. The program will consist of a symposium on critical evaluation of graphic registrations, a field in which Dr. Groedel, first president of the college, made fundamental contributions. J. E. Smith, CAA; John S. Graettinger, U. S. Naval School of Aviation Medicine; and Hubert Mann, Bruno Kisch, and Arthur Briskier will be among the speakers. Simon Dack will preside.

The **American Dental Association** (AAAS Section N associate) has named Leslie M. FitzGerald, of Dubuque, Iowa, president-elect. Otto Brandhorst, dean of Washington University School of Dentistry, was installed as president. Henry F. Westhoff, Fritz A. Pierson, and John F. O'Keefe were installed as vice presidents, and Harold Hillenbrand and H. B. Washburn were re-elected secretary and treasurer, respectively. The 1953 meeting will be held in Cleveland, Sept. 28-Oct. 1.

At the annual meeting of the **American Political Science Association** (affiliated with AAAS Section K) Pendleton Herring, president of the Social Science Research Council, became president, succeeding Luther Gulich. Ralph J. Bunche was named president-elect, and Charles Aikin, Charles McKinley, and E. E. Schattschneider were elected vice presidents. Walter H. Bennett, Hugh A. Bone, Robert A. Dahl, David Fellman, Victor Jones, Jack W. Peltason, Emmette S. Redford, and Clinton L. Rossiter were elected to the executive Council.

The Central States Section of the **Botanical Society of America** has elected John Winter, of the University of South Dakota, chairman, and Dwight M. Moore, of the University of Arkansas, vice chairman. Elzada U. Clover, of the University of Michigan, was elected to the Executive Committee.

The **Building Research Advisory Board** of the National Research Council-National Academy of Sciences will hold a conference on "Housing and Building in Hot-Humid and Hot-Dry Climates" Nov. 18-19 in Washington, D. C. Among the speakers will be Ralph Walker, Douglas H. K. Lee, Victor Olgyay, Albert Mayer, Aladar Olgyay, Robert H. Reed, Robert Deering, George M. Rapp, R. F. Dawson, J. Neils Thompson, W. R. Woolrich, G. E. Sutton, L. Thornburg, and T. H. Urdahl. Panel discussions will be held following each session. Registration forms may be obtained from the board, 2101 Constitution Ave., N.W., Washington 25, D. C.

Under the auspices of the **Committee on Lipoproteins and Atherosclerosis**, a technical symposium will

be held at the Knickerbocker Hotel, Chicago, Nov. 8, just preceding the annual meeting of the American Society for the Study of Arteriosclerosis. The committee was established in 1950 by the National Advisory Heart Council to plan and direct a cooperative study involving the determination of serum lipoprotein by the ultracentrifuge flotation technique. The symposium will not include a discussion of the results of the study, which has not yet been completed, but will deal with various technical problems. Those who wish to attend should make their own hotel reservations, but should notify J. Franklin Yeager, National Heart Institute, Bethesda 14, Md., from whom further information may be obtained. E. Cowles Andrus will serve as chairman of the meeting.

The **Society for Applied Spectroscopy** has elected E. J. Rosenbaum, of Sun Oil Co., president and Van Zandt Williams, of Perkin-Elmer Corporation, vice president. Charles Jedlicka, of Lucius Pitkin, Inc., and Charles H. North, of National Lead Co., were elected secretary and treasurer, respectively.

Miscellaneous

The **Atomic Energy Commission** Committee of Senior Reviewers has been increased from four to six members. New committee members are R. H. Crist, J. R. Richardson, Thomas B. Drew, and John P. Howe. Warren C. Johnson and J. M. B. Kellogg were reappointed, and W. F. Libby and R. L. Thornton resigned because of the press of other duties. Membership on the committee is for a five-year term.

The **Division of Chronic Disease and Tuberculosis** of the Bureau of State Services, USPHS, has established a program in the hygiene of aging. Cletus L. Krag, former research assistant, Division of Gerontology, Washington University School of Medicine, will direct the work, which is designed to demonstrate how state and local health departments can help meet the needs of our rapidly increasing population of persons over 65.

The **National Geographic Society** will support a comprehensive oceanographic expedition that will spend the next four years in undersea explorations around the globe. Leader of the expedition, which has the official backing of the French government and the French Academy of Sciences, will be Jacques-Yves Cousteau, coinventor of the Aqualung. The expedition ship is the *Calypso*, a converted American minesweeper. During the first two years the expedition will work in the Sargasso Sea, off Bermuda, at the mouth of the Amazon, along the coast of Patagonia, and in the Wedell Sea. The second two years will be spent off New Zealand, in the Ross Sea, along the Great Barrier Reef, in the Arabian Sea, and along the seacoast of Africa.

New journals received: *Japanese Journal of Ichthyology* (Japanese, with English abstracts). Bimonthly; Vol. I, No. 1, August 20, 1950. \$4.50. Japanese Society of Ichthyologists. Publishing office: Nippon

Gyogaku Shinko Kai, Tsukiji, 5-chōme, 1-banchi, Kyobashi, Tokyo. . . . *Japanese Journal of Pharmacology*. Official publication of the Japanese Pharmacological Society. Replaces *Japanese Journal of Medical Sciences*, Part IV, *Pharmacology*. Semi-annual; Vol. I, No. 1, Sept. 1951. Editorial Office: c-o Department of Pharmacology, Faculty of Medicine, Kyoto University, Kyoto. . . . *The Keio Journal of Medicine*. Quarterly; Vol. 1, No. 1, Jan. 1952. \$4.00, including postage; School of Medicine, Keio University, Shinjuku-ku, Tokyo. . . . *The Kumamoto Medical Journal*. Quarterly; Vol. 4, No. 2, Dec. 30, 1951. Kumamoto University College of Medicine, Kumamoto, Japan. . . . *Kyushu Memoirs of Medical Sciences* (English and other languages). Vol. 1, No. 1, June 1950. Kyushu University Faculty of Medicine, Fukuoka, Japan. . . . *Museum Pictorial*. Four or more issues per year, each restricted to a single title; No. 1, Feb. 1, 1951. 50¢ each, plus 6¢ postage. Denver Museum of Natural History, City Park, Denver, Colo. . . . *Revista Chilena de Entomología* (uses language of its writers). Facultad de Filosofía y Educación (Universidad de Chile) y de la Sociedad Chilena de Entomología. Vol. 1, 1951. \$3.50 U.S. . . . *Scientific Papers of the College of General Education, University of Tokyo*. Semiannual; Vol. 1, No. 1, Oct. 1951. . . . *Tlatoani* (Spanish). *Boletín de la Sociedad de Alumnos de la Escuela Nacional de Antropología e Historia, México, D. F.* Bimonthly; Vol. I, No. 2, March-April 1952. \$1.50 U.S. . . . *Transactions of the American College of Cardiology*. Vol. I, 1951. Publication Committee: 140 W. 57th St., New York 19.

The **Ordnance Development Division** of the National Bureau of Standards has been reorganized into Divisions 13, 16, and 17, which will deal with Ordnance Development Programs A, B, and C. New chiefs of the divisions are M. G. Domsitz, Jacob Rabinow, and Harold Goldberg. Wilbur S. Hinman, Jr., former chief of the division, has been appointed to the newly established position of associate director.

The government of **Poland** has awarded prizes in medicine to the following: Tadeusz Urbanski, Jakub Wegierko, Damian Cembala, and Stefan Slopek. Other science prizes went to Jan Stach (paleontology); Tadeusz Baranowski (chemistry); Stanislaw Maziarski (histology); Ignacy Reifer (botany); Wladyslaw Orlicz (mathematics); Stefan Piotrowski (astrophysics). A joint prize was given to a team of four investigators of cosmic rays headed by Marian Miesowicz. In the technical sciences the following were honored: Aleksander Rylke, Ignacy Malecki, Jaroslaw Nalozzkiewicz, Wladyslaw Wyrzykowski, Szymon Jachimowicz, and Tadeusz Soltys.

The **Torry Research Station**, Aberdeen, Scotland, will be the recipient of a trawler, which will function also as a laboratory designed for the study of fish preservation and spoilage. The order for the laboratory-ship has been placed by the United Kingdom's Department of Scientific and Industrial Development as part of its program of research on Great Britain's fishing industry.