

The Month at Caltech

Ringing the Changes

If you've been holding commencements for 79 years, it's a little hard to come up with something new. Even so, the ceremonies on Beckman Mall on June 8 had a few firsts.

The most noticeable was the awarding of the first BS degrees to women (page 20). Another was the absence of a special commencement speaker. This idea was suggested by the faculty committee on convocations so that more time could be devoted to honoring the graduates—and, in line with this policy, thesis titles were read off as PhD candidates received their hoods.

Arnold O. Beckman, chairman of the board of trustees, presided; and President Harold Brown concluded the event with brief remarks and good wishes to the 387 men and women on whom he had conferred 111 PhD, 104 MS, 8 Engineer, and 164 BS degrees.



The Month at Caltech . . . *continued*

Vetlesen Prize

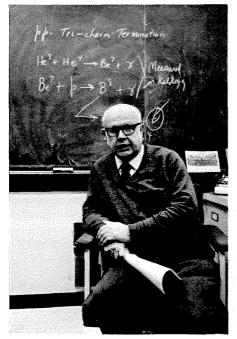
William A. Fowler, Institute Professor of Physics, received Columbia University's 1972 Vetlesen Prize last month for "contributions toward our understanding of the origin and evolution of the earth and its place in the universe."

The prize—a gold medal and \$25,000 is open to scientists of all nations and is given for "outstanding achievements in the sciences resulting in a clearer understanding of the earth, its history, or its relation to the universe." It has been called the Nobel Prize of the earth sciences.

Fowler's principal contributions to science have been in nuclear physics and its application to astrophysics and geophysics. His research into the interactions of matter and energy in the physics laboratory has made possible determinations of the processes of stellar evolution. "Almost all of our quantitative information about the basic nuclear processes that enter into stellar energy generation and element synthesis is due to Dr. Fowler or to work directly instigated by him," said the Vetlesen citation.

Fowler came to Caltech as a graduate student in 1933, receiving his PhD in 1936. He has been a member of the faculty ever since. He became a full professor in 1946 and the first Institute Professor in 1970.

William A. Fowler



Alumni Honors

Last month E&S reported a shower of honors to the faculty. Honors have also been pouring on alumni this spring. For example: In addition to four faculty members who are also Caltech alumni (E&S, May), the National Academy of Sciences elected four other alumni to membership this year. They are Andrew A. Benson (PhD'42), director of the physiological research laboratory and professor of biology at the Scripps Institution of Oceanography at La Jolla; Arthur E. Bryson Jr. (MS'49, PhD'51), professor of applied mechanics, aeronautics, and astronautics and chairman of the department of aeronautics and astronautics at Stanford University; William B. McLean (BS'35, MS'37, PhD'39), technical director of the Naval Undersea Research and Development Center in San Diego; and H. Guyford Stever (PhD'41), director of the National Science Foundation.

These new members bring to 74 the number of Caltech alumni memberships out of NAS's current roster of approximately 1,000.

The recent election of 70 engineers to the National Academy of Engineering brings its total membership to 429, of whom 45 are Caltech alumni. Ten of these were elected this year. Two of the ten were faculty (E&S, May), and the other eight are: William F. Ballhaus (PhD'47), Beckman Instruments, Inc.; Joseph V. Charyk (MS'43, PhD'46), Communications Satellite Corporation; George C. Dacey (PhD'51), Bell Telephone Laboratories, Inc.; John F. Kennedy (MS'56, PhD'60), University of Iowa; Daniel A. Okun (MS'38), University of North Carolina; Robert J. Parks (BS'44), Caltech's Jet Propulsion Laboratory; Harold A. Rosen (MS'48, PhD'51), Hughes Aircraft Company; and Ivan E. Sutherland (MS'60), University of Utah.



Marshall Hall Jr.

Cross Medal

Marshall Hall Jr., professor of mathematics, received the Wilbur Lucius Cross Medal at the Yale University commencement services in New Haven this month. The medal honors the late Wilbur Lucius Cross, who was dean of Yale's graduate school for many years and governor of Connecticut for four terms. Recipients of the medal are graduates of the school who have achieved excellence in an area in which Dean Cross excelled—scholarship, writing, teaching, editing, administration, or government.

Hall is an authority on combinatorial theory, which has to do with finding the most effective solution among a limited number of approaches. This area of mathematics has applications ranging from counting molecules to discovering the most efficient management systems. He is also noted for his work in group theory, which describes the symmetry of objects—particularly useful in molecular physics and chemistry in defining the symmetry of elementary molecules.

A professor of mathematics at Ohio State University before coming to Caltech in 1959, Hall received his PhD and BA degrees from Yale and was an instructor and assistant professor on the Yale faculty.

Retiring Coach

After 24 years as a coach at Caltech, Bert LaBrucherie is retiring. He came to the Institute in 1949 with a record of playing varsity football at Los Angeles High School and UCLA and 20 years of coaching at the same schools.

A 1929 graduate of UCLA, LaBrucherie's first coaching job was at his high school alma mater-Los Angeles High. He was there for 16 years, and his teams won three "B" team league titles and seven "A" championships. He also coached varsity track for six years. In 1945 he became head football coach at UCLA, and his 1946 team won the Pacific Coast Conference and played in the Rose Bowl. His four-year record at UCLA was 23 wins and 16 losses, but 7 of the 16 were in the 1948 season and some disappointed alumni expressed dissatisfaction. LaBrucherie resigned. After a brief stint as a used-car salesman while he considered other coaching jobs, he accepted Caltech's offer. This gave him a chance to get back to doing the thing he most enjoyed-and made it possible to stay in California.

For his first 19 years at the Institute, LaBrucherie's fall activity was to coach football, and his teams rolled up an impressive—but lopsided—tally of 121 losses, 19 wins, and 2 ties. Not a single alumni hackle even quivered. In fact, early this month more than 200 alumni and other LaBrucherie friends honored him with a farewell dinner at the Athenaeum.

Each spring he coached track, and by a

Gregory Ketabgian, MD





Drs. Stewart Harrison and Richard Webb

narrow margin the record was a winning one ---107 wins and 105 losses. About ten years ago LaBrucherie started teaching golf, and in 1968 he dropped football and became crosscountry coach.

Bert LaBrucherie doesn't have any longrange plans for retirement, except perhaps to see more of his family. But in the near future he and his wife will be taking a trip to Europe—thanks to the gifts and good wishes of 227 LaBrucherie admirers.

Health Director

Gregory Ketabgian, MD, has been appointed director of health services at the Institute, beginning July 1. He replaces Richard F. Webb, who has been director since 1953. Dr. Webb will continue to serve in a consulting capacity.

Dr. Ketabgian did his undergraduate work at UCLA, graduating in 1959. He received his MD from USC in 1963, and was first an intern and then a resident at Los Angeles County General Hospital. From 1967 to 1969 he served in the U. S. Army, after which he returned to Pasadena to set up a private practice in internal medicine—and to join the staff at Caltech's Young Health Center as attending physician. In 1972 he was appointed assistant director.

Retiring Doctors

Drs. Stewart Harrison and Richard Webb are retiring from the staff of Caltech's Health Center, and 75 of their friends and colleagues came to the Athenaeum on May 29 to honor them. Provost Robert Christy presented the men with certificates of appreciation for their long service to the Institute —a combined total of 58 years.

Stewart Harrison came to Caltech in 1935 as an assistant professor of radiation therapy. He was active in the early development of the treatment of cancer with high voltage x-rays, participated in the creation of a health center on the campus, and has been a medical consultant in radiation safety and diagnostic radiology.

Richard Webb has headed Caltech's health services program for 20 years. He worked on the design of the Young Health Center, helped inaugurate counseling services for the students, and has promoted wide use of Pasadena specialists as consultants.