

problems of inter-atomic arrangement, particularly with respect to the structure of crystals.

Dr. Harker, an authority on electron microscopy, received his B.S. from the University of California in 1928. After receiving his Ph.D. at Caltech in 1936 he taught chemistry at Johns Hopkins University for five years. He has been at the GE Research Laboratory since 1941.

NEW AEC RESEARCH DIRECTOR

DR. KENNETH S. PITZER, '35, who has already distinguished himself as one of the nation's leading physical chemists, has been appointed Director of Research for the U. S. Atomic Energy Commission. Dr. Pitzer, who took over his new duties on January 1, was professor of Chemistry at the University of California. He had been a member of the faculty at Berkeley since 1937.

As Director of Research, Dr. Pitzer will have charge of the AEC's research program in the physical sciences, and supervise the administration of the isotope production and distribution program.

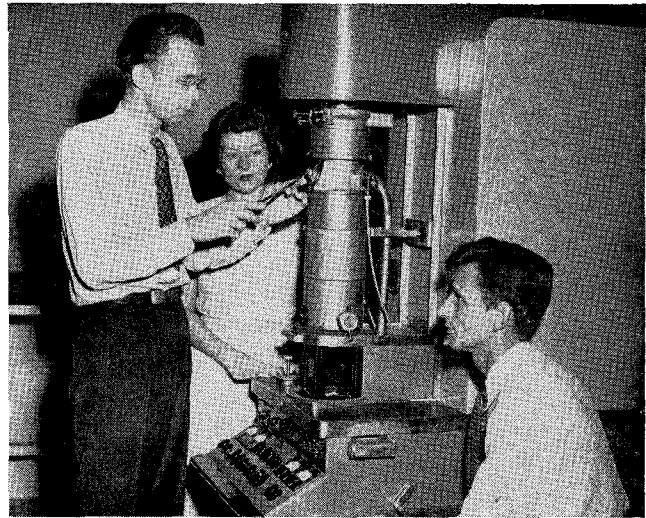
GENE PHOTOGRAPHER PEASE

DR. DANIEL C. PEASE, M.S. '38, and Dr. Richard F. Baker, both of the University of Southern California, reported this month that they had observed and photographed genes—the infinitesimal particles that transmit physical characteristics of living things from one generation to another.

Dr. Pease is Assistant Professor of Anatomy at the U.S.C. School of Medicine. Dr. Baker is Assistant Professor of Experimental Medicine. They made their observations with a standard electronic microscope on unprecedentedly thin cross-sectional slices of animal tissue. Chromosomes of the fruit fly, which are relatively large, were used in the experiments. By harden-

ing the tissue specimen with paraffin, collodion, and air chilled by dry ice, and using a new cutting technique which they developed themselves, the two scientists obtained slices only 1/250,000th of an inch thick. Electrons were thus able to penetrate the tissue sections to reveal their structure.

Observation of genes has been an ambition of scientists ever since Gregor Mendel first indicated the existence of these smallest particles of life, almost a century ago. If these actually are genes which Pease and Baker have observed and photographed, their discovery will be of enormous importance to medical and biological research. To date, though, other scientists are skeptical, waiting for further proof before they agree that genes have finally been seen.



Pease (right) and Baker aim an electron microscope at genes.

Personals

1923

Hubert Woods has resigned from the Riverside Cement Co. in Los Angeles to become Director of Research of the Portland Cement Association at its new research laboratories in Chicago.

1928

Carl F. Renz, M.S., materials engineer for the Ohio Division of the U. S. Engineers, has been named President of the Cincinnati Section of the American Society of Civil Engineers.

1929

Thomas H. Evans, head of the Civil Engineering Department at Georgia Tech, visited the Caltech campus early this month.

William G. Young, Ph.D., a member of the UCLA faculty since 1930, and now Physical Science Dean at UCLA, has been elected chairman of the Division of Organic Chemistry of the American Chemical Society.

1936

Robert G. Parker, Ex-'36, petroleum engineer at Seal Beach, Calif., for the

Continental Oil Company's producing and drilling department, has been promoted to the post of assistant district superintendent at Wichita Falls, Texas.

1938

Joseph F. Ware, Jr., M.S., reports he is a flight test engineer with the Lockheed Aircraft Corp. in Burbank.

Samuel E. Watson has returned from Venezuela where he spent seven years as a mining engineer for the Texas Company. He is now stationed in Bakersfield—still working for Texas.

Henry K. Evans, staff engineer of DeLeuw, Cather & Co., Consulting Engineers, has been appointed western representative of the firm, which has established a western office at 79 McAllister St., San Francisco.

1939

Edwin F. Sullivan, engineer with the U. S. Bureau of Reclamation in Sacramento, has been elected 1st Vice-President of the Sacramento Section of the American Society of Civil Engineers.

1940

Frank W. Brown, M.S., Lt. Comdr.

with the Medical Service Corps, U. S. Navy, was married in October to Miss Sue Heath in Larchmont, N. Y. He is now assigned to the Radiological Laboratory at the San Francisco Naval Base.

C. Fink Fischer, M.S. '41, Comdr. U.S.N., is now with the Pilotless Aircraft Development Laboratory of the Naval Air Development Station in Johnsville, Pa.

Keith E. Anderson is with the Iowa Geological Survey in Iowa City.

Jerome Kohl resigned in December from the Tide Water Associated Oil Co. to accept a position as Chemical Engineer in charge of Industrial Application for the Western Division of Tracerlab Inc., 2295 San Pablo Ave., Berkeley. He writes:

"Tracerlab's headquarters are in Boston. The three basic elements of its business are Instruments, Radiochemistry, and Industrial Applications of Isotopes. The Western Division, which has just been opened, includes two other Caltech men on its staff: Lloyd Zumwalt, Ph.D. '39, Technical Director, and Walton A. Wickett, Ex-'37, in charge of sales."

(Continued on Page 20)

1941

Gilbert A. Jones was recently married to Miss Hazel May of Lynchburg, Va. They are living in Richmond, where he is employed as an office engineer by the Stone & Webster Engineering Corp., on power plant construction.

J. Vern Hales, M.S., heads up the new department of meteorology at the University of Utah, in Salt Lake City. Hales joined the university staff in 1946, after he returned from overseas duty with the Air Force weather service.

Quentin Elliott, M.S. '42, and Mrs. Elliott announce the arrival of a son, Quentin Benedict—on Christmas day.

1942

Phil T. Mahaffey, M.S., was married in October to Miss Sally Ruth Rettys in Fort Worth, Texas. He is with the Consolidated-Vultee Aircraft Corp. in Fort Worth.

Alvin R. Piatt was married in Los Angeles on December 31 to Miss Glenna Hartley. They are living at 2505 South Hope St., Los Angeles.

1943

Robert M. Francis is an equipment designer for Pacific Airmotive Corp., Burbank. He and his wife have a year-old daughter, Leslie Louise.

David Shoner, M.S., '48, and his wife announce the arrival of their first child, a boy, on December 2. Dave is

studying for an A.E. degree at Caltech and working at the Jet Propulsion Lab.

1944

Ray A. Saplis writes that he and Delos Flint '39 have been on Okinawa for the past two and a half years mapping the island for the Army. Visits have also been made to the other islands

in the Ryukyus. They hope to return to the States this spring.

1945

Merritt A. Williamson, M.S., is Associate Director of Research and Development at the Pullman-Standard Car Manufacturing Co. in Hammond, Ind. He is living in Chicago.

1946

Fred Robins and his wife have a baby girl, Jan Marie, born in October. Fred is teaching Science and Math at Trona Unified Schools, Trona, Calif.

1947

Arthur J. Critchlow writes that he, Jim Smith '47, and Louis Dameson '44, are working with Owen Olds '44 on a U. S. Army guidance project at the Ryan Aircraft Corp. in San Diego.

William R. Bellew is studying at the Stanford Graduate School of Business.

Edwin J. Cowan was married in October to Miss Joyce Kullgren. He is working with the Day & Night Manufacturing Co. in Monrovia.

Bob Weidman spent the year after graduation at Indiana University, a summer doing geology field work with the Indiana Dept. of Conservation, and is now taking graduate work at the University of California, where he holds a teaching assistantship.

1948

M. D. Quigley is employed as a geologist with the Sinclair Oil Co. in Salt Lake City, Utah.

Index to Advertisers

Allen Machine & Tool Co.....	20
Army & Navy Academy.....	20
Atkinson Laboratory.....	20
Berkley Engng. & Equip. Co.....	20
Braun Corporation.....	3rd cover
Calmec Mfg. Co.....	3rd cover
Cheney, Lyle H.....	3rd cover
Grondahl, Harold O.....	20
Iron-Wood Co.....	20
Mock Printing.....	20
Oil Properties Consultants, Inc. & Petroleum Engng. Associates, Inc. 3rd cover	
Olney Bros.....	3rd cover
Smith-Emery Co.....	20
Smoot-Holman Co.....	2
Southern Pacific Co.....	2nd cover
Special Tools & Machinery Co.....	20
Truesdail Laboratories, Inc.....	3rd cover
United Geophysical Co.....	3rd cover
U. S. Electrical Motors, Inc.....	insert

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