

Indiana Nobelists and National Academy Members

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Four Indiana scientists have been awarded Nobel Prizes (recently about \$33,000 each): Herman J. Muller (born 1890), genetic zoologist; Edward M. Purcell (b. 1912), atomic physicist; Harold C. Urey (b. 1893), physical chemist; and Wendell M. Stanley (b. 1904), biochemist. Urey and Stanley are natives of Indiana, born in Walkerton (St. Joseph County), and Ridgeville (Randolph County) respectively. Purcell and Stanley are collegiate graduates of Purdue University and Earlham College respectively. Urey was started at Earlham, inspired by the distinguished chemist, Harry N. Holmes, professor there 1907-1914. (Urey left Earlham when Holmes went to Oberlin.) Muller was elected while a professor at Indiana University; Purcell was elected while a professor at Harvard; Urey, as a professor at Columbia, and Stanley while with the Rockefeller Medical Institute. All four Nobelists continue active in research and advanced teaching at Indiana, Harvard, Chicago, and California (Berkeley) respectively.

Twenty-one native Hoosiers have been elected to the National Academy of Sciences, recognized the world over by scientists as a very high honor: Warder C. Allee (b. 1885), ecological zoologist; Charles P. Berkey (b. 1867), geologist; John S. Billings (1838-1913), pathologist; Herbert E. Carter (b. 1910), chemist; Arthur C. Cope (b. 1909), chemist; Lee A. DuBridge (b. 1901), physicist; Charles A. Kraus (b. 1875), chemist; Frank C. Mann (b. 1887), physiologist; Ernest G. Merritt (1865-1948), physicist; William A. Noyes, Jr. (b. 1898), chemist; Francis W. Reichelderfer (b. 1895), meteorologist; Oscar Riddle (b. 1877), genetic zoologist; Vesto M. Slipper (b. 1875), astronomer; Lee Irvin Smith (b. 1891), organic chemist; Wendell M. Stanley (b. 1900), biochemist; Calvin P. Stone (b. 1892), psychologist; Frederick Terman (b. 1900), electrical engineer; Lewis M. Terman (b. 1877), psychologist; Harold C. Urey (b. 1893), physical chemist; Chester H. Werkman (b. 1893), bacteriologist, and Clark Wissler (1870-1947), anthropologist.

These 21 natives of Indiana were born as follows: Allee (Bloomington, Parke Co.), Berkey (Goshen, Goshen Co.), Billings (Switzerland Co.), Carter (Mooreville, Morgan Co.), Cope (Dunreith, Henry Co.), DuBridge (Terre Haute, Vigo Co.), Kraus (Knightsville, Clay Co.), Mann (Decatur, Adams Co.), Merritt (Indianapolis, Marion Co.), Noyes (Terre Haute), Reichelderfer (Harlan, Allen Co.), Riddle (Cincinnati, Greene Co.), Slipper (Mulberry, Clinton Co.), Smith (Indianapolis), Stanley (Ridgeville, Randolph Co.), Stone (Portland, Jay Co.), Urey (Walkerton, St. Joseph Co.), Werkman (Ft. Wayne, Allen Co.), and Wissler (Wayne Co.).

Four non-natives of Indiana were elected to the National Academy of Sciences while employed in Indiana. Ralph E. Cleland (b. 1892), genetic botanist; Carl H. Eigenmann (1863-1927), zoologist; Tracy M. Sonneborn (b. 1905), genetic zoologist; and Robert E. Wilson (b. 1883), petroleum chemist. Mr. Wilson was director of research for the Standard Oil Co.

of Indiana when elected; the other three were professors at Indiana University. No native Hoosier has been elected to the Academy while in Indiana. Six non-natives were elected after teaching in Indiana: John C. Branner (1850-1922), geologist; Douglas H. Campbell (1859-1952), botanist; John M. Coulter (1851-1928), botanist; Thomas C. Mendenhall (1841-1924), physicist; W. A. Noyes (1857-1941), chemist, and Burrhus F. Skinner (b. 1904), psychologist. Of these, Mendenhall and Noyes were at Rose Polytechnic Institute (Terre Haute), and Branner, Campbell, Coulter, and Skinner were at Indiana University. Coulter taught at Hanover and Wabash Colleges before becoming president of Indiana University. A former Eli Lilly employee, Homer W. Smith (b. 1895), chemist, was elected after leaving Indiana. Branner and Campbell were elected while professors at Stanford University; Coulter while professor at Chicago, Mendenhall while with the U. S. Coast and Geodetic Survey, Noyes while professor at Illinois, Skinner while professor at Harvard, and Smith while at New York University. Of these Academicians, those still active in 1953 are Allee, long at Chicago, now at the University of Florida, Carter at Illinois, Cope at Mass. Institute of Technology, DuBridge at California Institute of Technology, Noyes at Rochester, Reichelderfer, Chief of the U. S. Weather Bureau, Lee Smith at Minnesota, Homer Smith at New York University, Stanley at California (Berkeley), Stone at Stanford, Urey at Chicago, Werkman at Iowa State (Ames), Cleland, Muller and Sonneborn at Indiana University, Skinner at Harvard. The two Noyes and two Termans are father and son.

Of the National Academy members, Indiana University graduated (college degree) Mann, Riddle, Slipper, Stone, L. Terman, and Wissler; Earlham graduated Allee and Stanley and started Urey; Butler graduated Cope; DePauw graduated Carter; Purdue graduated Purcell and Werkman; and Manchester College graduated Paul J. Flory (b. 1910), physical chemist, at Cornell University.

Sketches of these men are given in Visser: *Indiana Scientists* (Indiana Academy of Science, 1951), and in *Who's Who in America*.