Plant molecular geneticist Susan Wessler studies the role of transposable elements (or transposons) in generating genetic diversity. Transposons are mobile pieces of DNA that are distinct from genes. Wessler's lab discovered a new class of transposons, called miniature inverted repeat transposable elements. Her work focuses on the role of transposons in plant genomes and the modified gene functions needed for evolution. Born in New York City, Wessler earned her B.A. at the State University of New York at Stony Brook in 1973, and her Ph.D. at Cornell University in 1980. Wessler completed a postdoctoral fellowship with the Carnegie Institute of Washington, working on model organisms for maize and grasses. Wessler is currently a Distinguished Research Professor in the department of plant biology at the University of Georgia, Athens, where she started working in 1983.