

A Tradition of Innovation

This issue of *CatholicU*, the redesigned University magazine, highlights the theme of innovation at Catholic University — faculty who are developing new courses and methods of teaching, or doing groundbreaking research; entrepreneurial alumni who are developing new products, businesses, and services.

Any innovation is something new, something that develops or changes an established practice or method or theory. So it might sound strange to say that at Catholic University innovation is an old tradition. But it is. Innovation was built into the idea of Catholic University.

When Catholic University was founded 130 years ago there were already a number of Catholic colleges in the United States, dedicated to conserving and handing on a well settled curriculum. The founding bishops proposed to create something new at Catholic University. They envisioned a research university that would not only conserve and teach an existing body of knowledge, but also advance and expand our intellectual horizons. At its very first meeting in 1889 the academic senate resolved that “the character and work of the University [should] not only embody the wisdom of the past, but be eminently adapted to the intellectual requirements of the present.”

The founders’ vision for Catholic University was born from a conviction that faith has nothing to fear from reason, that there is in fact a harmony between science and faith. More than that, they believed that intellectuals guided and shaped by the Catholic faith could make distinctive contributions to the rapidly expanding world of human knowledge. As the fathers of the Second Vatican Council put it in *Gaudium et Spes*, “faith throws a new light on everything.”

Our history has proved the founders right.

Albert Zahm, professor of mechanical engineering, built the first scientific wind tunnel laboratory in the United States on our campus in 1901. (This was two years before the Wright brothers made their first flight at Kitty Hawk.) His research on air friction helped determine the optimal shape for a plane’s hull. Clyde Cowan, professor of physics



from 1958 until his death in 1974, discovered the neutrino with Frederick Reines, whom he met while working on the staff of the Los Alamos Scientific Laboratory in 1956. During his career at Catholic University Cowan continued his experiments on the neutrino as well as work on cosmic rays and atomic radiation. Reines received the Nobel Prize in both their names in 1995.

Rev. John A. Ryan, an alumnus and professor of moral theology in the first half of the 20th century, developed and applied the Church’s social teaching to address the needs of the time. In 1919 Ryan wrote the U.S. Bishops’ *Program of Social Reconstruction*. Many of the ideas in the *Program* made their way into President Franklin Roosevelt’s New Deal.

Regina Flannery Herzfeld, an alumna and the first lay female professor at Catholic University, did pioneering work in the field of anthropology. Beginning in the 1930s she documented the cultural practices of Apache and Gros Ventre Native Americans and, farther north, the Cree and Montagnais, particularly the role of women in their societies. Euphemia Lofton Haynes became the first African American woman in the United States to earn a Ph.D. in mathematics. She got her degree from Catholic University in 1943. As a member, and then president, of the D.C. Board of Education during the 1960s, she worked to dismantle segregation in the D.C. public school system.

Today our faculty, staff, and students continue to carry on this great tradition of innovation at Catholic University. The scholarly work carried out at Catholic University is remarkably diverse. But it is born out of a shared conviction, the same one that inspired the founders of our University 130 years ago.

Regina Herzfeld, 1938.

Photo courtesy of The American Catholic History Research Center and University Archives