

**Dr. ERNEST EVERETT JUST**



**(1883-1941)**

## Who Was Ernest Everett Just?

Ernest Everett Just was an African American biologist and educator who pioneered many areas on the physiology of development, including fertilization, experimental parthenogenesis, hydration, cell division, dehydration in living cells and ultraviolet carcinogenic radiation effects on cells. Just's legacy of accomplishments followed him long after his death, on October 27, 1941.

### Early Life

Dr. Ernest E. Just was one of the first African Americans to receive worldwide recognition as a scientist. Born August 14, 1883 in Charleston, South Carolina, Just was only four years old when his father, Charles Fraser Just, died in 1887. Due to mounting debt, his mother, Mary Just, and her children moved from Charleston to James Island, a Gullah community off the coast of South Carolina, to work in its phosphate mines. Mary Just became a highly respected leader of the community and convinced a number of residents on the island to purchase land and start their own community. The residents renamed the community Maryville in her honor.

In 1896, Just was sent to attend the high school of the Colored Normal Industrial, Agricultural & Mechanical College (later named South Carolina State University). Known as an intelligent and inquisitive student, believing that he would receive a superior education by attending a college preparatory school in the North, Just enrolled in Kimball Union Academy

in New Hampshire in 1900. Although he was Kimball Union's only black student, Just recalled being in a warm and welcoming environment where he excelled in social activities and academics. It was during his university years that Just discovered an interest in biology after reading a paper on fertilization and egg development. This bright young man earned the highest grades in Greek during his freshman year and was selected as a Rufus Choate scholar for two years. He graduated as the sole magna cum laude student in 1907, also receiving honors in botany, sociology and history.

After graduation from Kimball Union, Just entered Dartmouth College in 1903. In contrast to his experience at Kimball Union, Just felt alone and socially isolated at Dartmouth. Nonetheless, he graduated *magna cum laude* in biology with a minor in history in 1907. He was also elected to Phi Beta Kappa.

After receiving his degree, Just accepted a position at Howard University as an instructor of rhetoric and English. In 1910, he joined the Department of Biology and was appointed professor in 1912. While at Howard, Just helped to found Omega Psi Phi Fraternity in 1911. Omega Psi Phi was the first black Greek-lettered fraternal organization founded at a historically black university. Just later became a member of Sigma Pi Phi Fraternity.

### **Career Success**

Just's first job out of college was as a teacher and researcher at the traditionally all-Black Howard University. Later, in 1909, he worked in research at Woods Hole Marine Biological Laboratory in Massachusetts. At the laboratory, Just realized

that a doctorate in the sciences was key to his success, and he began a program of self-study at the University of Chicago where he studied experimental embryology and graduated magna cum laude. He earned a doctorate in Physiology in 1916. Just published fifty scientific papers and two influential books, *Basic Methods for Experiments on Eggs of Marine Mammals* (1922) and *Biology of the Cell Surface* (1939).

Just pioneered many areas on the physiology of development, including fertilization, experimental parthenogenesis, hydration, cell division, dehydration in living cells and ultraviolet carcinogenic radiation effects on cells.

Just also served as editor of three scholarly periodicals and, in 1915, won the NAACP's first Spingarn Medal for outstanding achievement by a Black American. From 1920 to 1931, he was a Julius Rosenwald Fellow in Biology of the National Research Council — a position that provided him the chance to work in Europe when racial discrimination hindered his opportunities in the United States. During this time, Just penned many research papers, including the 1924 publication "General Cytology," which he co-authored with respected scientists from Princeton University, the University of Chicago, the National Academy of Sciences and the Marine Biological Laboratory.

Held in high esteem within his field, notable Black scientist Charles Drew called Just "a biologist of unusual skill and the greatest of our original thinkers in the field."

## **Personal Life**

Just married high school teacher Ethel Highwarden on June 26, 1912, and together they had three children — Margaret,

Highwarden and Maribel — before divorcing in 1939. That same year, Just married Hedwig Schnetzler, a philosophy student he had met in Berlin. In 1940, the German Nazis imprisoned Just in a camp, but, with the help of his wife's father, he was released. After making their way out of France, the couple gave birth to daughter Elisabeth.

## **Death**

Ernest Just died of pancreatic cancer in Washington, D.C., on October 27, 1941. He is buried at the Lincoln Memorial Cemetery in Suitland, Maryland.

## **QUICK FACTS**

- Name: Ernest Just Everett
- Birth Year: 1883
- Birth date: August 14, 1883
- Birth State: South Carolina
- Birth City: Charleston
- Birth Country: United States
- Gender: Male
- Best Known For: Ernest Everett Just was an African American biologist and educator best known for his pioneering work in the physiology of development, especially in fertilization.
- Industries
  - Science and Medicine
  - Education and Academia
- Astrological Sign: Leo
- Schools
  - Dartmouth College
  - Kimball Hall Academy

- University of Chicago
- Interesting Facts
  - Earnest Everett Just was the only magna cum laude recipient at his 1907 Dartmouth College graduation.
- Death Year: 1941
- Death date: October 27, 1941
- Death State: Washington, D.C.
- Death Country: United States