

## Howard Wilber Jones Jr. (1910-)

Howard Wilber Jones Jr. and his wife, Georgeanna Seegar Jones, developed a method of in vitro fertilization and helped create the first baby in the US using that method. Though the first in vitro baby was born in England in 1978, Jones and his wife's contribution allowed for the birth of Elizabeth Carr on 28 December 1981. Jones, a gynecologist and an obstetrician, researched human reproduction for most of his life.

Jones was born in Baltimore, Maryland on 30 December 1910. His father, Howard Wilber Jones Sr. was a doctor of internal medicine. From an early age, Jones Sr. allowed Jones Jr. to join him on house calls and hospital rounds. Jones's mother, Ethel Ruth Marling Jones, drove him to have the best possible education, despite only having a high school education herself. She forbade him to attend the city public schools, and she instead sent him to a more rural public school. After Jones Sr. died when he was thirteen years old, she transferred her son to a private school.

In 1927 Jones matriculated to Amherst College in Amherst Massachusetts. After graduating with an undergraduate degree in 1931, he studied at the Johns Hopkins University School of Medicine in Baltimore, Maryland, and received his MD degree in 1935, trained in gynecology and general surgery. In 1940 he took a chief residency in general surgery. After he completed his residency in 1940, Jones married Georgeanna Seegar, a gynecologist who had graduated from Johns Hopkins in 1936. When World War II began, Jones led Team 3 of the Auxiliary Surgical Group, a part of General George Smith Patton's Third Army. After his return from the war in 1945, Richard TeLinde, the chairman of the Department of Gynecology at Johns Hopkins, asked Jones to take a second residency in gynecology. Jones thus pursued his interest in the surgical aspects of reproductive medicine alongside Georgeanna, who researched endocrinology at the university.

In the mid 1970s, Mason Andrews, the chairman of the Department of Obstetrics and Gynecology at Eastern Virginia Medical School in Norfolk, Virginia, asked the couple to help him establish a Division of Reproductive Medicine. After retiring from Johns Hopkins in 1978 and moving to Norfolk, the Joneses opened the clinic in 1979. Within three years of their arrival, the Joneses developed a method for in vitro fertilization. They developed their technique after at least forty-one failed experiments. Midway through trials, Georgeanna realized that if they used the hormone human menopausal gonadotropin (hMG), which prompts the release of several eggs instead of just one, they might improve their chances of success. After twelve failed attempts using the hormone, the Joneses used their method of in vitro fertilization to help Judith Carr get pregnant. In 1981, Elizabeth Carr, the first US test tube baby, was born in Norfolk. To maintain the quality of patient care during in vitro fertilizations, the Jones established an ethics panel in 1984 under the American Fertility Society, now called the American Society for Reproductive Medicine.

The Jones and their colleagues published "The Program for in vitro Fertilization at Norfolk" in 1982. In the article, they discuss some previous attempts at in vitro fertilization in England and in Australia in 1980. With the results that gathered at the clinic in Norfolk, the authors note that the preceding experiments had perpetuated some minor misconceptions about in vitro fertilization. The Joneses' data indicated that supplementing the incubation of oocytes prior to fertilization proved to improve the success rate of in vitro as a whole. Moreover, the authors stimulated ovulations by introducing human menopausal gonadotropin (hMG) as opposed to clomiphene, which was the hormone doctors used in England and in Australia. Though the study failed to conclude which was better for the purposes of in vitro fertilization, the authors noted that hMG was effective. The Joneses and their colleagues further analyzed hMG in the 1983 article "The Importance of the Follicular Phase to Success and Failure in in vitro Fertilization." The report concluded that hMG played an integral

role in the success of in vitro fertilizations; patients who responded well to hMG also experienced high pregnancy rate.

The Joneses published, either individually or as a team, greater than 400 peer-reviewed papers. Additionally, the Joneses co-authored Novak's Textbook of Gynecology with Edmund Novak in 1988. The Joneses also collaborated with Robert Edwards, the English doctor who in 1978 helped create the world's first test tube baby, to study sperm and oocytes. Furthermore, Jones himself performed many sex change operations at the Johns Hopkins University Medical Center. Jones also provided care for Henrietta Lacks, a woman from whom researchers developed an immortal line of cancer cells.

As a couple, the Joneses received many honors and awards. They received nine honorary degrees and five visiting professorships, including a Fulbright Professorship in Australia. Additionally, more than twenty foreign medical societies, including the Royal College of Obstetricians and Gynecologists, awarded them honorary memberships.

As of March 2013, Jones lives in Denver, Colorado, and he has three children, Howard III, Georgeanna, and Lawrence. Jones wife, Georgeanna, died on 26 March 2005 of heart failure.

## Sources

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