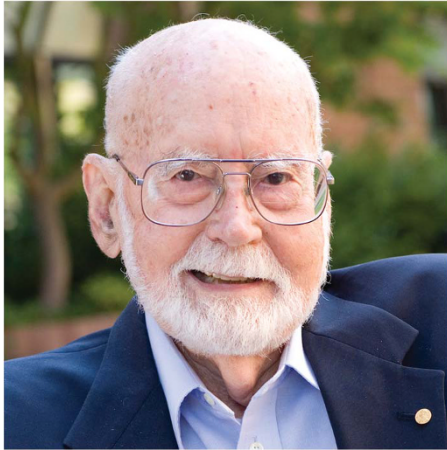


OBITUARY

E Donnell Thomas (1920–2012)

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Professor E Donnell Thomas, a towering figure in bone marrow transplantation, died in Seattle on 20 October 2012. In 1990 he shared the Nobel Prize for Physiology or Medicine with Professor Joseph E Murray who pioneered kidney transplants.

Don Thomas was born in rural Texas in 1920, where his father was a general practitioner and his mother a school teacher. At an early age he gained experience in hunting and fishing, both activities that he pursued enthusiastically all of his life. He studied chemistry at the University of Texas in Austin and then went on to Harvard Medical School, where he developed an interest in bone marrow function and leukaemia. He qualified as a doctor, spent 2 years in the army and then returned to further training at Harvard and MIT. In 1955, he was appointed physician-in-chief at the Mary Imogene Bassett Hospital in Cooperstown NY (part of Columbia University), where he established a dog model of bone marrow transplants with Joseph Ferrebee and Ted Graham. He remained there until 1963, when he moved to the University of Washington

in Seattle. He joined the Fred Hutchinson Cancer Research Center in 1974 to direct medical oncology.

Don Thomas's original interest in bone marrow transplantation had been based, in part, on events that followed the Second World War. As a result of the development of the atomic bomb, the US Government in 1945 recruited scientists to the National Institutes of Health to determine ways to counter effects of radiation on humans, especially bone marrow failure. In 1950, Jacobsen and colleagues reported shielding of the spleen and later intraperitoneal injection of spleen cells could 'protect' an irradiated mouse from death. The hypothesis was that 'factors' released by spleen cells stimulated recovery of the irradiated bone marrow. (The hypothesis was incorrect but led Erslev, Adamson, Goldwasser and others to isolate erythropoietin some years later) In 1952 Lorenz, Congdon and Uphoff showed that infusing bone marrow cells could also rescue lethally irradiated mice and guinea pigs. In 1952 Main and Prehn showed that a chimeric mouse would accept a skin graft from the bone marrow donor, and Ford used cytogenetics to prove that hematopoietic recovery was derived from donor bone marrow cells. The field was set: Don seized on these data and spent the rest of his life perfecting this approach, first in dogs and later in young persons with advanced leukaemia. He reviewed how he slowly, carefully and painstakingly advanced the field step by step in an article published in 1999 (*A history of haemopoietic cell transplantation. Br J Haematol* 105: 330–339).

A few key factors accounted for Don's success. He relied on the sound experimental basis for transplants in experimental animals. He was completely committed to his goal. He had a 'secret weapon', Dottie Thomas, his life-long supporter and collaborator. And he relied on a notion first put forward by Albert Einstein: 'Everything should be made as simple as possible, but no simpler.' Although the Dottie Thomas factor may be irreplaceable, we can all benefit by keeping the other factors in mind as we go (hopefully) forward.

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