

## **BOOK REVIEW**

## The First Transplant Surgeon: The Flawed Genius of Nobel Prize Winner, Alexis Carrel by David Hamilton

Hardcover, 608 pages World Scientific Publishing November 2016.

Few doctors are as controversial as the French surgeon, Dr Alexis Carrel, who pioneered major advances in surgery while promoting less attractive subjects such as eugenics.

David Hamilton's excellent and extensively researched biography stands out due to the exhaustive use of Carrel's archives and because of the insights that the author, a retired transplant surgeon and a historian, brings to Carrel's career. Chief among them is the way he allows us to see Carrel both as an outstanding scientist and as an imperfect man: "Carrel was a genius but a flawed one".

Throughout his life, Carrel provoked controversy. He left Lyon, his home town, because he could not obtain a hospital appointment. Instead, he joined the staff of the Rockefeller Institute for Medical Research in New York where he pioneered major developments in transplantation and vascular surgery. In 1912, at the age of forty, he was awarded the Nobel Prize. During World War I, Carrel returned to France and, in combination with the chemist Henry Dakin, developed a method for treating injured limbs that was a perfect example of scientific management. Later, Carrel became involved in tissue culture, developing the acclaimed "immortal cells" for which he was praised as the scientist who could make permanent life possible.

Carrel was an enigma and later became embroiled in controversy because of the views expressed in his bestselling novel, *Man the Unknown*, along with his opinions on eugenics and his apparent collaboration with the Vichy Government during World War II.

Hamilton is particularly strong on explaining surgical procedures and biological processes, and shows that Carrel's discoveries are still relevant today: "Carrel raised the possibility that a foreign graft might affect the host; yet again, he was right". The book also explores Carrel the man and his relationship with his co-workers, describing his difficult nature and over-eagerness for publicity.

History can never entirely be broken down into good and evil and – by placing Carrel in his time – Hamilton shows how it was possible for a man to hold extreme views and yet be a leader in his field.

Well researched and highly readable, *The First Transplant Surgeon* pulls off the difficult trick of reevaluating Carrel without ignoring his contentious beliefs and should prove of real interest to surgeons, historians and scientists.

Sean PF Hughes January 2017

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