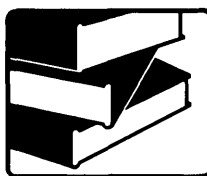


---

## Books



---

**Pavel, I.: The Priority of N. C. Paulescu in the Discovery of Insulin. Bucharest, Editura Academiei Republicii Socialiste Romania, 1976; 251 pages.**

This is a very peculiar book. In fact, it is not a medical book at all, in the usual sense of that word. Rather, it belongs to the class of literature which includes harangues, jeremiads, polemics, and certain religious tracts. The tone is such that you might expect to have had it thrust in your hands at an airport or found it in the "Take One" rack in a bus station. Basically the book is a long-winded and repetitious assemblage (in several languages—usually with English translations) of historical fact, opinion, correspondence, and reprints of scientific articles. Pavel uses this material to argue his case: that the "real" discoverer of insulin was his fellow Rumanian, N. C. Paulescu (1869–1931). Pavel also argues, by implication, that Paulescu was cheated out of his rightful glory by conniving on the part of Banting and Best (who misquoted Paulescu in their first publication on "The Internal Secretion of the Pancreas" in 1922) and the bias of the Nobel Prize committee. Well, Pavel is welcome to his malevolent and somewhat paranoid views; I prefer the more benign interpretation.

The "facts" are these.

1. In 1889, von Mering and Minkowski in Germany and de Dominicis showed that pancreatectomy produced "diabetes" in dogs.

2. In 1908, Forsbach showed that parabiotic dogs did not develop diabetes after one of the pair was pancreatectomized. He concluded that the pancreas was either a source of a hypoglycemic hormone or that it was a "detoxifier" which prevented hyperglycemia.

3. Also in 1908, Zeulzer showed that an alcoholic extract of pancreas could decrease glycosuria and stop ketonuria in eight diabetic humans. His experiments were halted because of severe systemic reaction to the crude pancreas extracts.

4. In 1912, Knowlton and Starling showed that a boiled acid extract of pancreas could normalize glucose utilization in the hearts of experimentally diabetic dogs.

5. In 1916, Sharpey Shafer reasoned that the antidiabetic action of the pancreas must be due to the secretion of a hormone and proposed that it be called "insulin."

6. In July of 1921, Paulescu published (in French) the results of his studies, begun in 1916 but interrupted by the war, on the "Action of pancreatic extract injected in the blood of the diabetic animal." Paulescu clearly demonstrated that his extract lowered blood and urine sugar and acetone in diabetic dogs.

7. In 1922 Banting and Best published the results of their experiments, begun in the summer of 1921, on "The internal secretion of the pancreas." They demonstrated that intravenous injection of pancreas extract normalized blood and urine sugar, improved the clinical condition, and maintained the life of diabetic dogs.

8. In 1923, Banting and McLeod received the Nobel Prize in physiology and medicine.

It is clear that Paulescu belongs in this genealogy; it is not clear that his exclusion from the Nobel citation is any more an injustice than that Best was excluded or that McLeod was included. There seems no doubt, however, that Paulescu was embittered by his being ignored and Pavel has taken up Paulescu's lament—a kind of chauvinistic *folie à deux* imputing purposeful misrepresentation to the erroneous translation of Paulescu's paper by Banting and Best and believing that this single sentence deflected the Nobel committee from recognizing Paulescu's contribution!

Phooey! Pavel and Paulescu's real problem lies in making the Nobel Prize the Holy Grail of scientific life and in thinking that fame makes any difference once you are dead.

I enjoyed seeing this book, although its length and redundancy represent forensic overkill on the author's part. I cannot recommend that you read it, since it was published in Bucharest in 1976 and is not commonly available here. I do wish that Pavel (and maybe Paulescu) had read Housman on the pitfalls along the path to glory.

*The thoughts of others  
Were light and fleeting  
Of lovers' meeting  
Or luck or fame.  
Mine were of trouble,  
And mine were steady,  
So I was ready  
When trouble came.*

—FRANCIS A. NEELON, DURHAM, NORTH CAROLINA.