

GERTY THERESA CORI



Gerty Theresa Cori, née Radnitz, was born in Prague, Austro-Hungarian Empire, on August 15, 1896. She received her primary education at home before entering a *Lyceum* for girls in from which she graduated in 1912. In 1920, she received a Doctorate in Medicine from the Medical School of the German University of Prague. She then spent two years at the Carolinen Children's Hospital before immigrating to America with her husband, Carl, whom she married in 1920. They both studied malignant diseases at the New York State Institute, Buffalo, NY, and she joined him as Research Associate. They moved to St. Louis University where she became Professor of Biochemistry in 1947.

The Cori's have collaborated in most of their research work, commencing in their student days. Their first joint paper resulted from an immunological study of the complement of human serum. They studied the fate of sugar in the animal body and the effects of insulin and epinephrine. The presence of glycolysis of tumors *in vivo* was demonstrated. Their work on carbohydrate metabolism involved studies of whole animal, isolated tissues, tissue extracts, and isolated enzymes. In 1936, they isolated glucose-1-phosphate, (Cori ester) and traced its presence to the activity of the phosphorylase, which catalyzes the breakdown and synthesis of polysaccharides. This discovery made possible the enzymatic synthesis of glycogen and starch *in vitro*. They have been consistently interested in the mechanism of action of hormones and they have carried out several studies on the pituitary. They observed that the marked decrease in glycogen and lowering of blood sugar in hypophysectomized rats occurred with a concomitant increase in the rate of glucose oxidation. Subsequently, by a study of the action of hormones on hexokinase, they observed that some pituitary extracts inhibit this enzyme *in vivo* and *in vitro* and that insulin counteracts this inhibition.

Gerty Cori and her husband were presented jointly with the Midwest Award (American Chemical Society) in 1946 and the Squibb Award in Endocrinology in 1947. They shared the 1947 Nobel Prize in Medicine for their discovery of the course of the catalytic conversion of glycogen with Bernardo Alberto Houssay for his discovery of the part played by the hormone of the anterior pituitary lobe in the metabolism of sugar

In addition, she received the Garvan Medal (1948) given only to women from the American Chemical Society, the St. Louis Award (1948), the Sugar Research Prize (1950), the Borden Award (1951) and honorary Doctor of Science degrees from Boston University (1948), Smith College (1949), Yale (1951), Columbia (1954), and Rochester (1955) Cambridge (1949). Gerty Cori was a member of the American Society of Biological Chemists, the National Academy of Sciences, the American Chemical Society, and the American Philosophical Society

Carl and Gerty Cori had one son. They became naturalized Americans in 1928. They have always been fond of outdoor hobbies. She died on October 26, 1957.

References:

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