

# Pitt Research Discoveries

## Biochemist Developed Synthetic Insulin

January 1924 - May 2019

In 1964, a Pitt team led by biochemist and researcher **Panayotis Katsoyannis, PhD** (January 7, 1924 - May 31, 2019) synthesized the protein insulin for the first time, a discovery that has saved the lives of millions of diabetics. Insulin, which is one of nature's most complex compounds, is produced by the pancreas to help the body convert sugar to energy. In people with diabetes, the pancreas does not produce enough insulin or cannot use it correctly.

Before Katsoyannis and his colleagues synthesized insulin, the only insulin available to treat people with diabetes was collected from the pancreases of animals. With the incidence of diabetes increasing dramatically by the middle of the 20th century, doctors worried that the supply of animal-sourced insulin could not keep up with demand. Today, nearly 285 million people worldwide have some form of diabetes.

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