

A Protein Central to Diabetes Uncovered

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UCSF researchers led by Feroz Papa, MD, PhD, have discovered a molecule, TXNIP, which initiates inflammation that leads to the death of the insulin-producing beta cells in the pancreas. Published in the journal *Cell Metabolism*, Dr. Papa's team learned that this protein dramatically increases the amount of stress found in these cells, and their subsequent death causes diabetes. Learn more about this exciting research through the [UCSF News Office](#) [1].

Based in both the Diabetes Center and the California Institute for Quantitative Biosciences (QB3), Dr. Papa is a practicing endocrinologist at SFGH. Dr. Papa's research focuses on the endoplasmic reticulum (ER) ? a compartment of the cell where insulin is synthesized. Dr. Papa believes that during the gradual development of both types 1 and 2 diabetes, the stress of processing unmanageable amounts of insulin will overwork the ER of the beta cell ? eventually leading to beta cell death. Dr. Papa's lab is engaged in finding new therapies to prevent beta cell death, and to thereby reduce the progression of diabetes.

Source URL: <http://www.diabetes.ucsf.edu/news/protein-central-diabetes-uncovered>

Links:

[1] <http://www.ucsf.edu/news/2012/08/12506/molecule-central-diabetes-uncovered>