Artifical Pancreas

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In 2006, JDRF launched the Artificial Pancreas Project (APP) to accelerate the development of a commercially-viable artificial pancreas system to closely mimic the biological function of the pancreas individuals with insulin-dependent diabetes, particularly type 1 diabetes. By automating detection of blood sugar levels and delivery of insulin in response to those levels, an artificial pancreas has the potential to transform the lives of people with type 1 diabetes. The 6-step APP development pathway serves as JDRF's APP strategic funding plan and defines the priorities of product research and development. Each step in the plan represents incremental advances in automation beginning with devices that shut off insulin delivery to prevent episodes of low blood sugar and progressing ultimately to a fully automated "closed loop" system that maintains blood glucose at a target level without the need to bolus for meals or adjust for exercise.