New portable/wearable technologies to measure glucose levels and adjust delivery of insulin and other glucose regulating hormones through an automated closed loop-artificial pancreas system have become available recently and pilot and advanced clinical trials have shown excellent results including improved maintenance of close to normal glucose levels with less variability and hypoglycemia when compared with non-automated open loop systems.

The purpose of this RFA is to support the activities of a technical and data coordinating center (DCC) for a consortium of advanced clinical studies that would be funded by a companion RFA (DK18-025) whose purpose is to expand testing of recently developed and emerging artificial pancreas device systems in clinical and outpatient settings with trials designed to generate data able to address safety and efficacy requirements by regulatory agencies for the eventual approval of a user friendly and accessible multicomponent product. The main research purpose of those studies is to prove and improve the efficacy, safety, accuracy and reliability of these new technologies in humans.

Eligibility & Requirements:
The applicant must have experience serving as the DCC for studies on complex, clinical conditions including the testing of closed loop platforms for diabetes control.