The UVA CDT is seeking individuals with Type 1 Diabetes who are 18 years and older for a clinical research study.

The purpose of this study is to test the safety of two algorithms (complex mathematical formulas) in development at UVA Center of Diabetes Technology. The Neural Net Implementation (NAP) algorithm attempts to use your past glycemic patterns as well as the history of many other type 1 diabetics glycemic patterns and then suggest glycemic changes. The UVA Model Predictive Control (UMPC) algorithm works when carbohydrate information at a meal is entered into the insulin pump and when it is not entered into the insulin pump.

You will be studied at a local hotel for approximately 20 hours per each session. The two hotel sessions can be performed back-to-back during the same hotel stay or in two hotel stays separated up to 28 days. After study enrollment, one week of data will be downloaded from your insulin pump or from your t:connect account to establish your baseline values.

You may be eligible for this study if:

- you are 18 years of age or older
- have a clinical diagnosis of type 1 diabetes for at least 1 year
- currently using insulin for at least six months
- currently using the Tandem Control-IQ (CIQ) automated insulin delivery (AID) system

Study-related tests including pregnancy test, physical exam, and HbA1c labs will be offered free of charge.

Compensation up to \$500 will be offered for completing the study.

We want to assure you that we will keep your information confidential. You do not have to be in this study if you do not want to participate. Your decision to be in any study is totally voluntary. Your care at UVA will not be altered by your decision to participate or not participate.

Contact Information:

For more information please contact:

- Morgan Fuller Clinical Research Coordinator
- <u>mf2nu@uvahealth.org</u>
- (434) 242-9379
- IRB-HSR #230058

Principal Investigator: Sue Brown, MD