MS Thesis Proposal

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Abstract

Introduction

Type 1 diabetes (T1D) is…

Metabolites are small molecule products of metabolism, and are involved in many vital processes, including energy storage, cellular signaling and apoptosis, post-translational protein modification and transport, and maintenance of homeostasis in the cellular milieu1. Analysis of the metabolome can therefore quantify the integrated response to endogenous and exogenous disease factors or other physiological changes. Previous studies have found an association between T1D and changes in phospholipids and sphingolipids and excretion of modified amino acids2.

References

1. Johnson CH, Ivanisevic J, Siuzdak G. Metabolomics: beyond biomarkers and towards mechanisms. *Nat Rev Mol Cell Biol*. 2016;17(7):451-459. doi:10.1038/nrm.2016.25

2. Frohnert BI, Rewers MJ. Metabolomics in childhood diabetes. *Pediatr Diabetes*. 2016;17(1):3-14. doi:10.1111/pedi.12323