

CPH Seminar in Precision Medicine

Progression and Subtypes of Prediabetes with Metabolomics Profiling in Starr County Mexican Americans"

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Diagnosis of type 2 diabetes occurs long after underlying metabolic changes have occurred. Prediabetes is currently defined by three tests: fasting glucose, 2-hr glucose, and HbA1C. Although all three predict diabetes, they differ somewhat in their biological underpinnings. Recent studies show that metabolomics provide important information about diabetes and its progression. We recently performed untargeted metabolomic and lipidomic assays to obtain a total of 7,661 raw features on 155 samples. Our preliminary results suggest that there are distinctive amino acid signatures in normal and prediabetic individuals. Moreover, we observed differences in amino acid levels between subtypes of prediabetes.



