Preliminary Exam (Specific Aims)

Aim 1: Determine Rare Variant Associations with MetS.

Aim 1a: Identify Effects of rare variants on components of disease.

Aim 1b: Integrate discovered associations between components to study wholistic affect on disease.

Aim 2: Determine sequence specific mechanisms of disease progression.

Aim 2a: Build a Genetic Risk Score (GRS) for MetS including the rare variants and common variants.

Aim 2b: Design CRISPR CAS9 KO guides based on exonic variants.