MASTERS THESIS PRESENTATION

Studying the Effect of Diastolic Blood Pressure on Lung Function Using Mendelian Randomization

WHEN
September 2, 2021
9:00 AM, CDT

WHERE
Via ZOOM
ZOOM information will be provided in the email announcement for this seminar.

Jason Lin, MS candidate

Confounding is an issue within epidemiology where an extraneous factor is correlated with the exposure while having a causal effect on the outcome, making it hard to accurately estimate the causal effect of the exposure on the outcome if the confounder is not measured. Mendelian Randomization (MR) is a method that estimates the causal effect of an exposure on an outcome by using genetic variants (single nucleotide polymorphisms) as instrumental variables; if MR assumptions hold, the estimate is not affected by unmeasured confounding. In my thesis, I apply MR methods to observed genomic data to study the effect of diastolic blood pressure on FEV1/FVC ratio (a measure of lung function), while also exploring the use of MR for epigenomic data.

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