



Centre for  
**Heart Lung Innovation**  
UBC and St. Paul's Hospital

## Centre for Heart Lung Innovation Research in Progress (R.I.P.)

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### Epigenetic Age Prediction in Targeted Methylation Sequencing Studies

**Denitsa Vasileva**  
Graduate Student  
Dr. Denise Daley

Monday, Oct 18th 2021  
9:00 – 10:00 a.m.

**Zoom Video Conference**  
(Meeting ID: 693 1997 7044; Passcode: 030679)

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*“The epigenetic clock is an aging biomarkers which leverages age-informative CpG sites and a mathematical algorithm to accurately predict epigenetic age. Epigenetic age acceleration (predicted age > chronological age) has been associated with the development of phenotypes such as asthma. The Horvath epigenetic clock is a commonly used age prediction algorithm consisting of 353 age-informative CpG sites identified using predominantly adult methylation array data. In this study, we assess the accuracy of the Horvath age prediction algorithm in methylation sequencing data from mostly pediatric samples as well as its utility as a quality control metric. In addition, we aim to identify novel age-informative CpG sites and develop a and more precise epigenetic clock that will aid in the investigation of epigenetic mechanism of disease phenotypes.”*

*This event is a Self-Approved Group Learning Activity as defined by the Maintenance Certification Program of the Royal College of Physicians and Surgeons of Canada*



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