An Agent-Based Model of COVID-19 Transmission at Lewis University

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As new variants emerge, the virus causing COVID-19 continues to spread in the United States and across the world. It is essential to find ways to mitigate its spread, and mathematical models can provide insight into the complex transmission dynamics of COVID-19. In this work, we formulate an agent-based model of the spread of COVID-19 at Lewis University in NetLogo that tracks students' interactions and contamination levels across campus. Using our model, we are able to compare the efficacy of control interventions, such as vaccination and quarantine, on reducing COVID-19 transmission at Lewis.