

Game of Proteins: An Interactive Board Game to Review the Secretory Pathway

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The secretory pathway is a vital component of cell biology. Many undergraduate biology courses cover the pathway in detail, yet students struggle to see how its components connect into the bigger picture of protein secretion. We have developed an interactive board game to illustrate and engage students in protein transport throughout the entire secretory pathway. This activity was originally developed for an introductory biology course in a small group discussion setting. In this game, students assume the role of a protein and answer questions to move through the pathway. Our questions range from protein movement and quality control to organelle function. The approximate time for this activity is 45 minutes, but can be adjusted for different settings and grade levels based on question difficulty. In this workshop, participants will have the opportunity to try the activity and learn how to administer it. Workshop participants will also be given a copy of the game board and a list of basic gameplay questions.

Keywords: secretory pathway in cells, game of proteins, cell biology

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