

Fast and friendly bacterial transformation for high school and college labs

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Ditch the dish and kick the ice bucket! Learn how you can simplify prep for bacterial transformation labs using the innovative MiniOne gloTray, which replaces four petri dishes. By simplifying teacher prep and increasing the success of student experiments, MiniOne gloTrays lower the barrier for inquiry-based transformation labs, making authentic biotechnology investigation accessible without the hassle of pouring plates. In this hands-on workshop, participants will complete our student and teacher friendly version of the classic GFP bacterial transformation lab, introducing a plasmid with the gene for green fluorescent protein into lab strain *E. coli* to make them fluorescent. Participants will then have the opportunity to create their own hypotheses and design experiments to test them using a fresh gloTray. A background presentation will cover the mechanism of transformation and the control of gene expression, with connections to the central dogma of molecular biology, antibiotic resistance, and the COVID vaccine.

Keywords: bacterial transformation, molecular biology, microbiology

Mission, Review Process & Disclaimer

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