

## Bacterial transformation

- Locate chemically competent bacteria in the  $-80^{\circ}\text{C}$  freezer downstairs.
- Keep bacterial tubes on ice. Gently, directly into bacteria, add  $3\mu\text{L}$  of ligated product. The ligation product can be stored at  $-20^{\circ}\text{C}$  for later use.
- Chill mixture on ice for 30 minutes.
- After a 30 minute chill, heat shock bacteria for 40 seconds in  $42^{\circ}\text{C}$  water bath. Place cultures back on ice. Add  $500\mu\text{L}$  LB (WITHOUT ANTIBIOTIC) to bacterial tubes and incubate at  $37^{\circ}\text{C}$  for one hour.
- After one hour incubating, dump bacteria onto plates and spread appropriately.
- Incubate plates for 24+ hours at  $37^{\circ}\text{C}$ .