Name of the Protocol: **Heat-shock transformation of E. coli**

Notes:

Materials:

Chemo-competent cells
50 mM CaCl$_2$

How:

- Combine the following in a micro-centrifuge tube:
  - 5 µl of ligation mix
  - 95 µl of 50 mM CaCl$_2$
  - 30 µl comp. cells
  Mix gently by tapping the tube.

- Incubate the tube as follows:
  - 10 min on ice
  - 1 min at 42°C
  - 5 min on ice
  Be exact with timing

- Add 1 ml SOC medium
- Shake for 1h at 37°C
- Plate 100 µl on plates containing the appropriate antibiotic
- Incubate plates overnight at 37°C