Making electrocompetent cells

- 1. Streak out desired strain from frozen stock and incubate overnight (include drug if present).
 - a. $DH5\alpha = G184$
 - b. BL21 = G274
 - c. Rosetta = G518
- 2. Innoculate 5 ml culture with colony from step one (include drug if present) and shake/incubate overnight.
- 3. Subculture 5 ml into 500 ml of media (include drug if present).
- 4. Shake/incubate until an OD_{600} of 0.5 is reached (this takes approximately 4 hours).
- 5. Pour culture into sterile 500 ml centrifuge bottle.
- 6. Chill culture in icy water for 30 minutes.
- 7. Centrifuge in GS-3 rotor @ 5,000 rpm for 15 minutes @ 4°C.
- 8. Pour off supernatant and completely resuspend pellet in 500 ml cold sterile nanopure water.
- 9. Centrifuge in GS-3 rotor @ 5,000 rpm for 15 minutes @ 4°C.
- 10. Pour off supernatant and completely resuspend pellet in 500 ml cold sterile nanopure water.
- 11. Centrifuge in GS-3 rotor @ 5,000 rpm for 15 minutes @ 4°C.
- 12. Pour off supernatant and completely resuspend pellet in 10 ml cold sterile 10% glycerol.
- 13. Transfer to a chilled 50 ml centrifuge bottle.
- 14. Centrifuge in SA-600 rotor @ 10,000 rpm for 10 minutes @ 4°C.
- 15. Pipet off supernatant and completely resuspend in 1 ml cold sterile 10% glycerol.
- 16. Make aliquots of 50 μl to 250 μl into cold sterile 1.5 ml microfuge tubes.
- 17. Quick freeze in ethanol bath and store at -80°C.