Gel Purification
December 10, 2010

Description: After DNA is isolated from running the gel, the relevant band is cut out using a razor blade, and then purified using a DNA purification kit.

Time: 45min

1. **Cutting out bands from gel**
    a. Label large epi tubes for each band
    b. Take gel, along with razor blad, forceps, goggles, labeled large epi tubes, and lane info to UV camera (in common room)
    c. Take a quick UV picture of the gel. Keep this picture up – this will tell you if your gel ran correctly and which bands to cut
    d. Open door, and with GOGGLES ON and gel near the door, turn on UV by pressing UV button on inside (tip-near on inside ceiling). Bands will glow. (Alternatively, you may use the UV box in the 4th floor common room).
    e. Carefully and quickly cut bands out with a razor blade, and use forceps to pull them out.
    f. Place each band into appropriate labeled tube.
2. **DNA purification from gel**
    a. Take out UltraClean DNA purification kit (bottom right drawer of Zeller's bench).
    *The following steps apply to each tube
    b. Pre-heat 65C dry bath
    c. Thaw glass milk (should be stored in freezer box)
    d. Add ~0.5ml of iodide salt (smaller brown bottle)
    e. Place tubes in dry bath at 65C for 5-10min. Vortex if necessary. This will melt gel. Make sure gel is entirely melted!
    f. Add 6ul of dissolved (vortexed) glass milk. Suspend for 5-10min (vortex). DNA will stick to glass beads in milk.
    g. Centrifuge for 5sec. Remove supernatant
    h. Repeat Ultra Wash
    i. Resuspend in 25ul of ultrapure H2O. Pipette up and down to mix. **Do not vortex!**
    j. Incubate in H20 for 5-10min
    k. Supernatant contains DNA. Transfer supernatant to new tube. **DO NOT THROW AWAY SUPERNATANT!** Store in -20C.