

# GRID STAINING

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## Materials Needed:

- UranylLess (substitute for Uranyl Acetate) and Lead citrate 3%. (Use care with stains – they are toxic!)
- 2 Petri dishes with covers
- 2 plastic beakers
- Parafilm
- NaOH pellets (do NOT leave these open – they are deliquescent)
- Boiled D-H<sub>2</sub>O
- Squirt bottle containing D-H<sub>2</sub>O
- forceps
- Ripped pieces of filter paper
- Paper towels
- Liquid waste container

## PROTOCOL:

1. Use pipette drop UranylLess solution on parafilm in the first petri dish. Place your grids **section side down** on the drop of UranylLess solution for ~ **5 min** but no more than **30 min**!
2. Put 5-10 NaOH pellets in the second petri dish. Use pipette drop Lead Citrate solution on the parafilm in the second petri dish and cover.
3. Wash each grid in D-H<sub>2</sub>O above the beaker.
4. GENTLY dry the grid by swiping a piece of filter paper in between the prongs of forceps that hold grid or use the filter paper gently touch the edge of the grid if needed. **DO NOT TOUCH THE SURFACE OF THE GRID WITH FILTER PAPER!**
5. Place grid section side down in the Lead Citrate solution for ~**45 sec** but **<2 min**. **Remember cover the petri dish while waiting.** Do not leave in Lead Citrate solution too long!
6. Dip each grid in the beaker with Boiled D-H<sub>2</sub>O, followed by a thorough rinse with a fine stream of deionized water using the squirt bottle with D-H<sub>2</sub>O. Dry with filter paper as above. Place in grid box.
7. Clean up. Rinse the stains off the parafilm and petri dishes in the waste container. Remove NaOH pellets from Petri dish to the waste container.