

## Preparing Square Plastic Coverslips with Collagen

### Making Plastic Cover Slips:

- ❖ In the tissue culture hood, remove cover slips one-by-one with flame-sterilized tweezers.
- ❖ Remove 3 (60 x 15 mm) Petri dishes and place in hood
- ❖ Remove the lids of 2 of the Petri dishes. Leave one of the open Petri dishes empty and fill the other with 70% ethanol
- ❖ Cut each plastic cover slip lengthwise into 4 pieces and allow the pieces to fall into the empty, open Petri dish
- ❖ Remove each cut piece with tweezers and cut each strip again into 4 pieces allowing them to fall into the Petri dish containing ethanol. Repeat with all needed coverslips. (This should make 16 cut coverslip pieces for each original coverslip).
- ❖ When finished cutting cover slips, allow them to soak in ethanol for 30-60 minutes with the lid on the Petri dish
- ❖ After soaking, open and fill the third Petri dish with 70% ethanol and obtain a few larger Petri dishes (150 x 15mm) and place them in the hood. Remove the lids of the 150 x 15mm Petri dishes keeping them sterile.
- ❖ Remove the coverslips one-by-one with tweezers and dip each several times in the second dish filled with 70% ethanol. Shake off excess ethanol into empty 60 x 15mm Petri dish.
- ❖ Place each cover slip tilted against the edge of the lid of the larger Petri dish (150 x 15mm) to dry in hood. (Allow them to dry completely before proceeding to the next step.)
- ❖ While drying, remove several 35 x 10mm tissue culture dishes and place in hood. Also, remove collagen from refrigeration at 4°C and allow to come to room temperature.
- ❖ When dry, transfer 6 coverslips to one 35 x 10mm tissue culture dishes.
- ❖ Pipette collagen onto one cover slip (enough to cover, about 2mL for every 6, 35 x 10mm dishes) and let sit ~1 minute. Push the coverslips down to the bottom of the dish with the tip of the pipette to ensure the coverslip has been coated using sterile technique.
- ❖ Remove excess collagen with pipette (leaving wet) and repeat for all other coverslips.
- ❖ Dry for a few hours in the hood.
- ❖ When dry, place lids on each 35mm dish and transfer up to 6 dishes to a large Petri dish (150 x 15mm) and cover.
- ❖ Wrap the Petri dish with parafilm and store at 4°C for weeks until use. Bring to room temperature just prior to replating cells.

