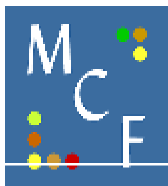

**Baylor College of Medicine**
**Microarray Core Facility**
One Baylor Plaza, Room 452A, Houston, Texas 77030
(713) 798-7699 microarray@bcm.tmc.edu

## Silanization Protocol

1. Clean glass trays by rinsing with $ddH_2O$ before using. The silane tray should then be rinsed with 95% EtOH, and the acetone tray should be rinsed with acetone.
2. Sonicate the slides in acetone for 10 minutes.
3. After the acetone sonication, wash slides in $ddH_2O$ tray at least twice.
4. Sonicate the slides in .1M NaOH for 10 minutes.
5. While the slides are sonicating in NaOH, make the following silane solution under a hood:

| **REAGENTS** | **For small trays (30 slides) add:** | **For large trays (60 slides) add:** |
|---|---|---|
| 95% EtOH | 350 mL | 800 mL |
| Glacial Acetic Acid | 42 µL | 96 µL |
| Glycidoxypropyltrimethoxy silane | 11 mL | 25 mL |

NOTE: Do not add the silane until the NaOH sonication is finished. After the silane is added, stir for 1-2 minutes.

6. After the NaOH sonication, wash slides in $ddH_2O$ tray at least twice.
7. Sonicate the slides in silane solution for at least 3 minutes. DO NOT oversonicate (5 minutes maximum!!).
8. Wash the slides in 100% EtOH tray.
9. Dry with prepurified $N_2$ gas. Store in 100°C oven. Wait at least 2 hours before using slides.

## 2X Phosphate Printing Buffer (pH 10.5)

- 400 mM $Na_2HPO_4$
- 1.6 M NaCl
- NaOH to pH 10.5
- Filter Sterilized 1-2000

Add 5µL to printing plates and 5µL of cDNA to make a 1X working buffer.