## Safetygram

ISM-150

## LABORATORY PERSONNEL

September 2008

## **ELECTROPHORESIS EQUIPMENT**

The electrophoresis unit that you probably use most, usually gets the least consideration. Preventative maintenance may be pre-empted by another laboratory procedure. In view of the potential risks to yourself, others in your lab, and your research, basic preventative maintenance is extremely important. A thorough weekly visual inspection of your apparatus should include the following:

**POWERCORDS** – Visually look for exposed wires, corroded ends, and loss of flexibility. Faulty cords are a potential fire hazard, and may cause electrical shock if not in good working order. Replace any defective cords and properly discard any old power cords. <u>EXTENSION CORDS SHOULD</u> NOT BE USED.

**BANANA JACKS AND ELECTRODES** - Look for corrosion, loose or unstable plugs, and corroded electrode connection nuts. These problems will affect the reproducibility of your experiment and may also be a potential fire hazard.

**GASKETS** - Aging gaskets lose their elasticity and develop leaks that place you, your research, and your equipment in danger. You should replace such gaskets immediately. Faulty gaskets may cause electrical arcing and sparking which can lead to a fire.

**SAFETY COVERS** – EHS recommends using a unit that has a safety cover over the buffer chambers. This completely encloses the gel separation assembly, and reduces the possibility of electrical shock.

**Note:** Electrophoresis equipment should not be altered in any fashion at anytime. Equipment alterations may void manufacturer's warranties, and place personnel and the unit at risk.

If you have any questions regarding the safe use of electrophoresis equipment, please call EHS at x1451.