

# Standard Operating Procedures

Laboratory Specific – Biochemistry Shared Instrumentation Facility

## BioRad Pharos FX Plus – Tecan M1000 Reader – LiCOR Odyssey

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Department: Chemistry and Biochemistry      Date when SOP was written: Sept 20, 2012

Date when SOP was approved by the lab supervisor: \_\_\_\_\_

Supervisor Name and Signature: Margot Quinlan \_\_\_\_\_

Internal Laboratory Safety Coordinator/Lab Manager: Matthew Graf

Laboratory Phone: 310-      Office Phone: 323-447-6288

Emergency Contact: Margot Quinlan (310) 206-8064

Location(s) covered by this SOP: Young Hall 5044, 5048A, 5048B

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**Type of SOP:**     Process     Hazardous Chemical     Hazardous Class

### Purpose

These instruments are used to perform light based assays and imaging, each in a particular wavelength range or sample format.

Pharos FX Plus – The imaging of 2D gels and screens (visible, fluorescence, phosphorescence).

Tecan M1000 – Similar functionality as the Pharos FX, but for assays in multi-well plates.

LiCOR Odyssey – The imaging of 2D gels and screens in the infrared light range.

**The PRIMARY HAZARD** associated is that produced by any laser based light system. **All instruments are rated as Class I Lasers**, as their light paths are fully enclosed, and internal safeguards prevent light exposure. Keep in mind however, that these are still high-powered lasers: NEVER attempt to open the machine in anyway besides that demonstrated during the instrument specific training. Only professional service providers are allowed to open the instruments.

### Potential Hazards/Toxicity

**Inhalation – N/A**

**Skin – N/A**

**Eyes – N/A**

**Ingestion – N/A**

**Additional – Standard Electrical Hazard for all instruments - avoid touching electrical junctures and mind liquid spills which could damage electrical components.**

### Basic Training Requirements

- Lab personnel working with the **any facility instrument** must have attended the '*Laboratory Safety Fundamental Concepts*' classroom training course offered by EH&S and have read and signed the Shared Instrument Facility General Use Safety Policy.
- Lab personnel must have attended an instrument specific training session with the Biochemistry Instrument TA or Instrument facility approved manager prior to any use, covering general use and safe practices of the instrument in question.

### **Personal Protective Equipment (PPE)**

No Additional PPE is required beyond what is stipulated by the General Use Safety Policy.

### **Respiratory protection**

None required

### **Hand protection**

None required unless by the demands of a users personal experiment.

### **Eye protection**

Standard Goggles.

### **Skin and body protection**

Lab coat, long pants, closed-toed shoes.

### **Hygiene measures**

Avoid touching instrument surfaces with gloved hands. Wipe instruments with 20% EtOH - dampened towel following use.

NEVER TOUCH Computer surfaces (mouse, keyboard etc) with gloved hands.

### **Engineering Controls**

None required.

### **First Aid Procedures**

Treat if possible in accordance with the type of injury, consult a physician or seek emergency care if necessary.

### **Spill and Accident Procedure**

Clean any spill according to the demands of the chemical nature of the experiment being conducted. See the General Use Safety Policy.

### **Medical Emergency Dial **911** or x52111**

**Life Threatening Emergency, After Hours, Weekends And Holidays** – Dial **911** (or 310-825-1491 from cell phone) or contact the Ronald Reagan UCLA Medical Center (emergency room) directly at **x52111** (located at 757 Westwood Plaza, enter from Gayley Avenue). *Note: All serious injuries must be reported to EH&S at **x59797** within 8 hours.*

**Non-Life Threatening Emergency**– Go to the Occupational Health Facility (OHF), **x56771**, CHS room 67-120 (This is on the 6<sup>th</sup> floor, 7<sup>th</sup> corridor, room 120. Enter through the School of Dentistry on Tiverton Drive and proceed to the “O” elevator to the 6th floor.)Hours: M - F, 7:30 a.m. to 4:30 p.m. At all other times report to Ronald Regan UCLA Medical Center (emergency room) at **x52111**. *Note: All serious injuries must be reported to EH&S at x59797 within 8 hours.*

### **Needle stick/puncture exposure**

N/A

### **Decontamination/Waste Disposal Procedure**

#### **Label Waste**

N/A

#### **Store Waste**

NO WASTE STORAGE ALLOWED IN FACILITY

#### **Dispose of Waste**

CHEMICAL WASTE TO BE DISPOSED OF BY USER OUTSIDE OF FACILITY

Gloves and towels free from exposure to Hazardous chemicals may be disposed of in provided trash cans.

### **Safety Data Sheet (SDS) Location**

Copies Located in the “Facility Safety Binder” in Young Hall 5044

### **Protocol/Procedure**

- 1) Remove any hand protection you are wearing.
- 2) Initialize instrument and computer as demonstrated during instrument specific training.
- 3) Open sample tray.
- 4) If required by chemical nature of your experiment, put on hand protection.
- 5) Load sample into sample tray.
- 6) REMOVE hand protection, and close sample tray.
- 7) Perform experimental scans as demonstrated during instrument training.
- 8) Repeat Steps 3-4 to remove your sample.  
**FOR TECAN M1000 – skip to Step 11**
- 9) Use dry towels to removed any solution on scanner trays. Dispose of as chemical nature demands.
- 10) Dampen towels with 20%EtOH squirt bottle, and wipe down the scanner tray.  
NEVER SPRAY BOTTLE TOWARDS INSTRUMENT OR COMPUTER
- 11) Dampen fresh towels with 20%EtOH squirt bottle and wipe down instrument surfaces, as well as the keyboard and mouse if it got dirty.
- 12) Log out and shut down system as demonstrated during the instrument specific training.

### **NOTE**

Any deviation from this SOP requires approval from a Facility Manager.

### **Documentation of Training** (signature of all users is required)

I have read and understand the content of this SOP and have undergone training by an approved Facility Manager. I also attest that I have read and signed the Instrumentation Facility General Use Safety Policy prior to this instrument specific training.