

Standard Operating Procedure

SOP Number: **02-18-4150**

Service: **Research**

Operating Section: **Husbandry**

Unit: **CMF**

Title: **Temperature, Relative Humidity and Light Cycle Control and Monitoring**

Purpose:

To describe the procedures of environmental monitoring for the CMF, including temperature, relative humidity and light cycle control and monitoring in the animal rooms.


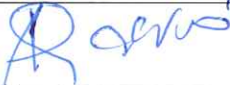
Procedure:

- 1) The CMF will use environmental monitoring screens to monitor temperature and relative humidity within all occupied animal rooms in the CTRE. These wall-mounted units utilize an LCD readout of temperature in °F and relative humidity in %. The CMF will use digital thermohygrometers to monitor temperature and relative humidity within all occupied animal rooms in the Cancer Center. These wall-mounted units utilize an LCD readout of temperature in °F and relative humidity in %.
- 2) For each occupied animal room, daily temperature and relative humidity and/or maximum and minimum values (depending on equipment available) will be recorded on a log form by the animal care technician responsible for that room.
- 3) If the temperature reaches the following parameters: (a) rodents, a low of 68° or a high of 79°; (b) rabbits, a low of 61° and a high of 72°; (c) NHPs, a low of 64° and a high of 84°; or (d) swine, a low of 61° and a high of 81°, the animal care technician will verbally notify the Operations Manager, CMF, immediately. In addition, if the relative humidity exceeds or falls below the recommended ranges, the animal care technician will verbally notify the Operations Manager, CMF, immediately. Work orders for repair or correction will be initiated by the Operations Manager, CMF, or designee and submitted to LUC Facilities.
- 4) The thermohygrometers automatically store the maximum and minimum readings of temperature and relative humidity. The values will be recorded on the temperature and relative humidity record once daily by the animal care technician responsible for that animal room, using the following procedures:
 - a) By pressing the "HYGRO -- MIN" button once, the LCD will display minimum relative humidity stored. Pressing the button again returns to normal state.
 - b) By pressing the "HYGRO -- MAX" button once, the LCD will display the maximum relative humidity stored. Pressing the button again returns to normal state.
 - c) By pressing the "THERMO -- MIN" button once, the LCD will display minimum temperature stored. Pressing the button again returns to normal state.
 - d) By pressing the "THERMO -- MAX" button once, the LCD will display the maximum temperature stored. Pressing the button again returns to normal state.
- 5) After recording these values, the animal care technician will then re-set the unit to record for the subsequent 24 hours, using the following procedures:
 - a) Pressing both "HYGRO -- MIN" and "HYGRO -- MAX" buttons at the same time.
 - b) Pressing the "THERMO -- RESET" button once in "MIN" mode to reset minimum

temperature recording and once in "MAX" mode to reset maximum temperature recording.

- c) The unit will then be set to read the current parameters ("normal state") as above.
- 6) The back of each thermohygrometer will be labeled with the animal room number to which it is assigned.
- 7) Each thermohygrometer unit within an occupied animal room will be checked daily and batteries will be replaced semi-annually.
- 8) If a unit is malfunctioning it will be replaced.
- 9) Overhead lights in the CMF are fluorescent bulb fixtures which have been equipped with energy-saving ballasts and tubes.
- 10) Lights in corridors, storage rooms, support areas, and locker rooms are not under special timers or controls. Normal wall switches are installed for these lights. These lights will be turned off when not in use in accordance with general practices of energy conservation.
- 11) Lights in animal rooms are controlled by the onsite Lutron servers; timers are set for 12/12 hour on/off cycle. Alternate arrangements are possible provided all users within the specific room agree to a revised schedule; alternate schedules must be justified in an approved IACUC protocol.
- 12) Lights will be checked daily and documented on the log by the animal care technicians, and failures are reported to the Operations Manager, CMF, or designee for corrective action. Bulbs are replaced by LUC Facilities via appropriate work orders.

APPROVALS

Responsible Official Signature		Date	
		04/26/18	
QA Signature			Date
			04/26/2018
Version #3	Effective Date	Supersedes #2	Original Date 10/15/14