

## Elective in Physiology

### Basics of animal handling and research

S. No.	Name of the Elective	Basics of animal handling and research
1	Block	I
2	Department/ Area	Physiology
3	Name of Mentor/ Supervisor/ In charge	Dr Iqbal Alam, Professor, Department of Physiology, HIMSR
4	Co-Supervisor	Dr Bhawna Mattoo, Assistant Professor, Department of Physiology, HIMSR
5	Number of students intake	02-05
6	Method of Selection (if applicable)	Interview to determine a candidate's core understanding and interests in the field of animal experimentation.
7	Objectives	<ol style="list-style-type: none"><li>1. To acquire basic knowledge about animal handling.</li><li>2. To understand the importance of ethical aspects and importance of animal research.</li><li>3. To help a trainee gain competencies in animal research.</li></ol>
8	Expected outcomes	<ol style="list-style-type: none"><li>1. To explain the importance of animal experimentation.</li><li>2. To know the ethical aspects of animal experimentation.</li><li>3. To follow the correct methodology for disposal of biomedical waste generation during animal experimentation.</li><li>4. To perform basic animal anthropometrical techniques independently.</li><li>5. To be able to perform recording of biological signals like EMG, ECG etc in rat model with assistance.</li><li>6. To be able to perform cannulation of rat carotid artery , independently.</li><li>7. To describe the routes of drug administration in rats and calculation of dose according .</li><li>8. To describe the physiological basis of animal models of few diseases like heart failure, preeclampsia etc.</li></ol>
9	Assessment	<ol style="list-style-type: none"><li>1. Attendance</li><li>2. Day to day participation in animal research and handling activities during the routine training hours.</li><li>3. Performance of assigned task and presentation of results in the department.</li></ol>
10	Log book	Regular log book entry of daily activities. See Appendix 1 for log book details.