

Research Centre
Mahavir Cancer Sansthan
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Contact Persons

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RESEARCH TRAINING MODULE FOR 15 DAYS

Week - 1	<ul style="list-style-type: none">➤ Registration➤ Lecture on Cancer Overview➤ Hospital Visit➤ Research Overview➤ Overview of Research Equipments➤ Haematological Tests – RBC, WBC counts and Haemoglobin Percentage.
Week - 2	<ul style="list-style-type: none">➤ Biochemical Tests – Liver Function Test, Kidney Function Test, Protein and Cholesterol test➤ Short presentation of Work (10 minutes)➤ Interaction with Oncologists,➤ Project Submission and➤ Certificate Distribution

RESEARCH TRAINING MODULE FOR 30 DAYS

Week - 1	Registration <ul style="list-style-type: none">➤ Lecture on Cancer Overview, Hospital Visit➤ Overview of Research Equipments Molecular Biology Experiments <ul style="list-style-type: none">➤ Agarose Gel Preparation for Electrophoresis➤ Sample Loading in Agarose wells & analysis of result through U.V. Transilluminator. Medicinal Chemistry Experiments <ul style="list-style-type: none">➤ Medicinal Chemistry – Grinding, Sieving & soaking of Medicinal Plants
Week - 2	<ul style="list-style-type: none">➤ Separation of Polar & Non- polar components of Medicinal Plants through Rotavapor Environmental Monitoring Experiments <ul style="list-style-type: none">➤ Assessment of Heavy Metals especially Arsenic in Water & Human Blood Samples Haematological Experiments <ul style="list-style-type: none">➤ Semen Analysis in Animal Model➤ Haematological Test – RBC Count
Week - 3	<ul style="list-style-type: none">➤ Haematological Test – WBC Count, DLC, Hb% and Platelets Count Biochemical Experiments <ul style="list-style-type: none">➤ Biochemical Test – Liver Function Test, Kidney Function Test
Week - 4	Histopathological Experiments <ul style="list-style-type: none">➤ Histological Study – Animal Dissection & Tissue Fixation, Tissue Processing, Block Preparation, Tissue Sectioning utilizing Ultra- Microtome and Double staining.➤ Slide Viewing on Microscope➤ Short presentation of Work (10 minutes)➤ Interaction with Oncologists,➤ Project Submission and➤ Certificate Distribution

RESEARCH TRAINING MODULE FOR 2 MONTHS

Week - 1	<ul style="list-style-type: none">➤ Registration➤ Lecture on Cancer Overview,➤ Basics of pre-clinical/clinical study in research
Week - 2	<ul style="list-style-type: none">➤ Data Collection/ Dose administration for designed study
Week - 3	<ul style="list-style-type: none">➤ Data Collection/ Dose administration and analysis of initial results➤ Short presentation of Work (10 minutes)
Week - 4	<ul style="list-style-type: none">➤ Sample analysis on different equipments according to planned experiments
Week - 5	<ul style="list-style-type: none">➤ Data Collection/ Dose administration result analysis and development of presentation skill
Week - 6	<ul style="list-style-type: none">➤ Data Collection/ Dose administration for designed study➤ Acquaintance with research instruments
Week - 7	<ul style="list-style-type: none">➤ Analysis of final results➤ Develop project writing skill➤ Short presentation of Work (10 minutes)
Week - 8	<ul style="list-style-type: none">➤ Interaction with Oncologists➤ Project preparation and Submission➤ Certificate Distribution

RESEARCH TRAINING MODULE FOR 3 MONTHS

Project work on different topics given below :-

1st Short presentation of Work (10 minutes) = 6th week

2nd Short presentation of Work (10 minutes) = 10th week

RESEARCH TRAINING MODULE FOR 6 MONTHS

Project work on different topics given below:-

1st Short presentation of Work (10 minutes) = 6th week

2nd Short presentation of Work (10 minutes) = 10th week

3rd Short presentation of Work (10 minutes) = 20th week

Topic for Study:

- Self selected**
- Selected after counselling**
- Topic Selected from Data**
- Mandatory to have impact on Cancer management**

Some selected Topics for study are

- 1. Estimation of arsenic in Gall bladder cancer patients through Atomic Absorption Spectrophotometer.**
- 2. Arsenic estimation in water sample through Atomic Absorption Spectrophotometer.**
- 3. Estimation of pesticide in water and blood samples through HPLC**
- 4. Study of lipid peroxidation levels in different Cancer patients.**
- 5. Development of Tumour Markers against conventional tumour markers.**
- 6. Study on reactive oxygen species in cancer patients.**
- 7. Genotoxic study of pesticide and heavy metal through chromosomal analysis.**
- 8. Chromosomal anomalies in cancer patients.**
- 9. Cytotoxic study of doxorubicin and cyclophosphamide in animal model.**
- 10. Search for antidote against Arsenic induced toxicity in animal models.**
- 11. Effect of selected medicinal plants on diabetes in animal models.**
- 12. Search for effective ingredient of medicinal plant against diabetes.**
- 13. Study of Profenofos in the reproductive system of Swiss albino mice.**
- 14. Evaluation of impact of Aspartame on the fertility of Swiss albino mice.**
- 15. Study of impact of various medicinal plants on various toxicological models.**
- 16. Isolation of active ingredient of selected medicinal plant on rota vapour.**
- 17. Development of anti – tumour drugs against DMBA induced breast tumours in rats.**

RESEARCH TRAINING MODULE FOR 6 MONTHS

Week – 1	<ul style="list-style-type: none">➤ Registration➤ Lecture on Cancer Overview,➤ Decision on Topic and Work Plan
Week – 2nd -8th	<ul style="list-style-type: none">➤ Data Collection/ Experiment for study
	<ul style="list-style-type: none">➤ Work progress presentation for 10 minutes (Free) (Monday)
Week – 9th -16th	<ul style="list-style-type: none">➤ Data Collection/ Experiment for study
	<ul style="list-style-type: none">➤ Presentation on different topic for 10 minutes
Week – 17th -22nd	<ul style="list-style-type: none">➤ Data Collection/ Experiment for study, use of instruments in research
	<ul style="list-style-type: none">➤ Final Work progress presentation for 10 minutes
Week – 21st – 23rd	<ul style="list-style-type: none">➤ Result analysis➤ Compilation of project
Week – 24th	<ul style="list-style-type: none">➤ Submission of Project➤ Certificate Distribution