

**Medical mycology** : is the study of fungi that produce disease in humans and other animals, and deals with those infections in humans, and animals resulting from pathogenic fungi.

**Course Objectives:**

The purpose of the medical mycology laboratory section is to help students learn skills to work safely with fungi in practical applications.

**Laboratory studies will include :**

1. Collection of specimens and selection of samples like Hair, skin scrapings, sputum, blood, urine, corneal scratching, pus, and contaminated nails.
2. Clinical specimen microscopic analysis
3. Ultraviolet exam for fluorescent hair (Wood's Light )
4. Fungi-cultivation
5. Identification of specific dermatophyte isolates
6. Dermatophyte isolation from soil-hair bait technique
7. Cultivation of Yeasts
8. Germ tube test and chlamyospore development
9. Fermentation carbohydrate test for yeast identification
10. Fungi keratinolytic activity

**Speciment collection and transport:**

- Specimen should be collected from active lesion
- Specimen should be collected under aseptic conditions
- Collect sufficient specimen
- Use sterile collection devices and containers
- Specimen should be labelled appropriately
- Methods of specimen collection , Imprint , Swab , Oral rinse

**Guidelines for fungal sampling:**

- To avoid bacterial overgrowth, all specimens must be transported to the laboratory without any delay.
- Specimens other than skin and blood specimens can be refrigerated for a limited period of time in case of delay
- Using forceps, contaminated hair can be plucked. Hairs can be gathered in paper envelopes that are sterilized.
- Until sample collection, the surface of the skin must be sterilized with alcohol. Using a forceps, the tip of the injury is scraped and collected in sterilized paper envelopes.