

SRI AUROBINDO UNIVERSITY

INDORE, M.P.

SYLLABUS

Fellowship Course in Diagnostic Dermatology

1. Proper name of the course

Fellowship Course in Diagnostic Dermatology

2. Duration of the Course

6 months

3. Eligibility criteria for admission and intake capacity

MD (Dermatology)/DVD / DNB DERMATOLOGY

4. Complete Curriculum of the course

Introduction

1. Methods of Dermatologic Diagnosis and Differential Diagnosis
2. Scope of Dermatopathology
3. Role of a dermatopathologist in dermatology and clinical medicine
4. Conduct of skin biopsy
5. Dermoscopy and other microscopic devices
6. Biochemical investigations in dermatology
7. Microbiologic investigations in dermatology
8. Immunologic investigations in dermatology -
9. Investigations in hair disorders.
10. Role of Dermoscopy, Trichoscopy and Onychoscopy in dermatological disorders, hair disorders and nail disorders.
11. Role of Microscopy (Tzanck Smear, Slit Skin Smear and KOH mount) and other devices in diagnosis of Dermatological disorders.
12. Routine staining and Special stains in Dermatology

Approach to diagnosis of skin pathology

1. Pattern analysis
2. Benign vs malignant
3. Patterns of inflammation
4. Combination patterns
5. Algorithmic approach
6. Generating a differential diagnosis or diagnosis

Diagnosis of Deposits, cysts, hamartomas and hyperplasias neoplasm

1. Importance of silhouette
2. Biologic behavior
3. Benign and malignant epithelial neoplasms
4. Neoplasms with Appendageal differentiation
5. Non-epithelial neoplasms

Special stains in dermatopathology

1. Conduct of special stains
2. Place of special stains
3. Pitfalls

Immunofluorescence

1. Direct immunofluorescence
2. Indirect immunofluorescence

Microbiologic studies

1. Preparation of Smear (Tzanck smear, Slit Skin Smear and KOH Mount) and routine staining (Gram's stain, Modified Ziehl Neelsen stain, Giemsa Stain,Etc.)
2. Identification of organisms in smears
3. Culture of organisms
4. Identification of organisms in tissue section (H & E stain and Special stain)

Dermoscopy

1. Hand held dermoscope
2. Video dermoscope
3. Dermoscopy in pigmentary disorders (Pigmentoscopy)
4. Dermoscopy in inflammatory disorders (Inflammascopy)
5. Dermoscopy in mucosal lesions (Mucoscopy)
6. Dermoscopy in neoplastic disorders

Investigations in hair disorders

1. Hair mount
2. Trichogram
3. Phototrichogram

Other microscopic techniques in dermatology

1. Polarising microscopy
2. Dark ground illumination

5. Teaching scheme : Total periods and periods allotted to each topic

1. **Didactic lectures:** These will be held once a week and will be delivered either by a faculty member or by a specialist in the area of dermatology, pathology or related disciplines.
2. **Dermatopathology reporting sessions :** These will be held for approximately 1-2 hours daily and will constitute the main training ground for the students. During these sessions the candidate is expected to learn routine reporting on H/E stained skin sections as well as special stains and direct immunofluorescence technique. Apart from skin biopsies, candidates will also be exposed to mucosal, nail and nerve biopsies.
3. **Dermoscopy hands on training and reporting:** One a week for approximately one hour hands on training will be arranged on a dermoscope and reporting on the dermoscopic images will be done. In addition, students will be encouraged to use a dermatoscope as often as is needed.

6 **Fees :** As prescribed by the University from time to time

7. **Selection & Admission procedure**

Advertisement will be put on the Notice Board/ News paper.

Candidate should apply and will be selected.

8. **No. of candidates**

As prescribed rules by the University

9. **Application**

On plain with biodata to be submitted to SAU, Indore in response to advertisement on website.

10. **Books recommended**

- a) Rook's Textbook of Dermatology
- b) Fitzpatrick's Dermatology
- c) IADVL Textbook of Dermatology.
- d) Fitzpatrick's Color Atlas and Synopsis of Clinical Dermatology
- e) IADVL Atlas Of Dermoscopy
- f) Weedon's Skin Pathology
- g) Lever's Histopathology of the skin

11. **Expected learning objectives**

On completion, the fellow will be able to use of clinical, dermoscopic and histopathological tools in the diagnosis of various dermatological disorders and to Spread the knowledge and skill in all parts of the country.

12. **Research**

The fellow will be expected to complete a research project (dissertation) under the guidance of his/her academic guide. Presentations in conference and publications will be strongly encouraged.

13. **Syllabus**

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5. Dermoscopy and other microscopic devices

6. Biochemical investigations in dermatology
7. Microbiologic investigations in dermatology
8. Immunologic investigations in dermatology -
9. Investigations in hair disorders

Approach to diagnosis of skin pathology

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6. Generating a differential diagnosis or diagnosis

Diagnosis of neoplasm

1. Importance of silhouette
2. Biologic behavior
3. Benign and malignant epithelial neoplasms
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Deposits, cysts, hamartomas and hyperplasias

Special stains in dermatopathology

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Immunofluorescence

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Microbiologic studies

1. Identification of organisms in smears
2. Culture of organisms
3. Identification of organisms in tissue section

Dermoscopy

1. Hand held dermoscope
2. Video dermoscope
3. Dermoscopy in pigmentary disorders (Pigmentoscopy)
4. Dermoscopy in inflammatory disorders (Inflammoscopy)
5. Dermoscopy in neoplastic disorders

Investigations in hair disorders

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Other microscopic techniques in dermatology

1. Polarising microscopy
2. Dark ground illumination

Practice during the course of the fellowship with clinical features of dermatological cases, histopathology slides and dermoscopy of skin and mucosal lesions.

Hair microscopy and trichograms : Once a week during the alopecia clinic, candidates will be trained to do hair microscope and trichograms including phototrichogram on clinic patients.

Diagnostic problem discussions: This will be held every fortnight and each student is expected to discuss 10 problems during the course. Also, within the institute attendance at the staff society meetings where research is presented and the CPC (Clinic-Pathological- Correlation) meetings is mandatory.

Clinico-pathologic correlation sessions: This will be held once a week with the patient and pathology slides both being presented by a student for the faculty.

Seminars and journal clubs: Seminars and journal clubs will be held once a week. Candidates are required to present 1 seminar and 1 journal club per month.

Ward rounds and postings in allied disciplines : In consultation with the department of pathology and microbiology, the candidates will be made to undergo 15 day rotations to get an idea of the perspective of these branches with respect to dermatopathology.

The candidates will also be required to visit dermatopathology laboratory and interact with the technicians so as to familiarize themselves with the technical knowledge of preparing good skin section.

Research and teaching: Since the department has adequate material for several academic research projects, it is expected that the fellowship candidate will plan several academic research projects, develop their protocols and make ethics committee submissions, collect, compile and analyze research material and prepare reports. They are required to give lectures on selected topics to the 3rd year undergraduate medical students.

Books

1. Lever's Histopathology of the skin –
2. Handbook of Dermoscopy --- Malvey and Braun
3. Pinkus's guide to dermatohistopathology -- Pinkus and Mehregan
4. An algorithmic approach to Histopathologic diagnosis of inflammatory diseases of the skin Ackerman
5. Neoplasms with follicular differentiation --- Ackerman
6. Neoplasms with sebaceous differentiation --- Ackerman
7. Neoplasms with apocrine differentiation --- Ackerman
8. Clues to diagnosis in dermatopathology Vol 1- 4 --- Ackerman
9. Differentiation diagnosis in dermatopathology Vol 1-4 – Ackerman

Journals

1. Archives of Dermatology
2. Journal of American Academy of Dermatology
3. Indian Journal of Dermatology, Venereology and Leprology
4. Indian Journal of Pathology
5. American Journal of Dermatopathology
6. Journal of Cutaneous Pathology
7. Dermatology Practical and Conceptual
8. Indian Journal of dermatopathology and diagnostic dermatology

14. Scheme of examination in details :

(Number of question papers, Number of marks to each question paper, Duration of question paper, practical examination etc.)

Eligibility: Candidate will be allowed to appear after 6 months of training. The fellow will be expected to submit a log of cases attended. The research done will be scrutinized.

Board of examiners: Dermatologist (MD) with minimum 3 years of teaching experience in the specialty.

Each year an examination coordination committee (ECC) will be nominated by the director. Both theory and practical Examination will be concluded within 15 days of the end of the course.

Theory

100 marks

10 short notes of 10 mark each to be attempted from 12 questions. Passing marks 50 % All theory examination will be held on a single day for all courses of similar lengths.

Practical

100 marks

Ten slides (50 marks) of a variety of skin pathologies, smears or hair mounts and 10 Dermoscopic images of common dermatological disorders will be kept and candidates will be expected to describe the slides/clinical images and reach a diagnosis or differential diagnosis for each of them.

This will be followed by viva voce (50 marks) during which each candidate will be examined by each examiner simultaneously for between 60 and 90 mins.

Passing marks 50% candidates have to pass individually in both theory and practical.

15. Infrastructure required for conducting the course and its availability in your college.

1. Hand Held Dermoscope
2. Video Dermoscope
3. Microscope with requisite attachments
4. Wood's Lamp
5. DSLR Camera

The existing infrastructure of the department of Dermatology will be used.

This will include seminar room for teaching, laboratories for training, computers for software training as well as training on patients and volunteers from ongoing studies.

No additional infrastructure is necessary.

16. Faculty required with their qualification and experience

Those with MD in Dermatology with 3 years teaching/ training experience.

The following are the existing faculty :

Professor - Dermatology

Associate Professor - Dermatology

Assistant Professor - Dermatology

17. Advertisement

On the institutional notice boards.

18. Interview

By a panel of experts of three – including the head of the institute and two Professors.

19. Selection

Selection will be based on performance at interview 30% University level academic merits (20%), Publication if any (20%), and recommendations from PG teacher (30%)

20. Announcement of results

Results will be announced on the website and notice board within one week of the conclusion of the examination.

The result will be only “Fellowship granted/denied and marks will not be displayed. Repeats will be at the end of no earlier than 3-6 months depending on the length of the course.

21. Award of Fellowship

Certificates will be awarded by the SAU, Indore after the results will be sent to the SAU.

The University (with signature of the Registrar) will award the certificate.

Note-

The decision of the Examination Co-ordination Committee will be binding on all matters pertaining to the examinations