

NIRF - INDIA RANKINGS 2019: 72 among Universities in India

FELLOWSHIP PROGRAM ON DERMATOPATHOLOGY

Department of Pathology and Dermatology

SYLLABUS & REGULATIONS



2019-2020 ONWARDS

(As Approved in the Academic Council at the Meeting held on 22.05.2019)

Sri Balaji Vidyapeeth University Mahatma Gandhi Medical College & Research Institute DEPARTMENT OF PATHOLOGY AND DERMATOLOGY

FELLOWSHIP PROGRAM ON DERMATOPATHOLOGY



DEPARTMENT OF Pathology and Dermatology

Fellowship Program on Dermatopathology
2019-2020 Onwards

Sri Balaji Vidyapeeth Mahatma Gandhi Medical College & Research Institute

Fellowship Program on Dermatopathology

Eligibility Criteria: Post MD / DNB (Pathology and

Dermatology), DDVL

Course Duration: Twelve months

	Specific Learning Objectives
S no	At the end of the courses, the candidates will be able to
	This course will enable the participants to develop skills in
1.	doing basic histopathology procedures, microscopic
	examination, interpret special stains pertaining to skin
	lesions and basic clinical examination which pursue their
	carrier as competent dermatopathologist
2.	This course will give adequate exposure in both clinical,
	research and histopathological knowledge in flied of
	dermatopathology
3.	This course will provide adequate exposure for the
	participants with basic dermatological procedure as well as
	in molecular diagnosis in dermatological lesions
4.	The fellow will provide dermatopathological teaching to medical students, fellow residents, and residents from other departments

S	Theory Syllabus	TL	Number	Credits
no	Theory Syllabus	strategy	of	Credits
		31	hours	
	COURSE MATERIAL FOR			
	DERMATOPATHOLOGY			
	Part I			
	Basics of Dermatopathology			
1.	:			
	1. Skin biopsy – basic			
	histopathological			
	techniques	Practical'	2 hrs	
		S		
2.	Commonly used terms in	SDL / theory	2 hrs	
	dermatopathology, Histology	cheory		
	of Skin,			
	Epidermal and dermal			
	reactions			
3.	Special stains	Practical'	10	
		s /theory/		
		SDL		
4.	IHC markers:	Practical'	20	
	> Basic procedures	s/theory/ SDL		
	> Basic Panel of			
	markers for			
	dermatopathologi			
	callesion			

5.	Immunofluorescence in skir	
	Biopsies	s/theory/
	➤ Basic IF techniques (Bot)	
	direct and indirec	
	procedures)	
	> Interpretation of I	7
	pertaining to diagnosis	
	> IF in vesiculobullou lesions and connective tissue autoimmundisorders.	e



6.	Application of EM in	Theory/ SDL	2	
	various skin disorders			
7.	Basic clinical skills -	Theory/ SDL	2	
	history taking, clinical	/ assignment		
	examination and			
	differential diagnosis.			
8.	Various biopsy techniques,	Practical's	20	
	their indications and	/ theory/		
	contraindications	SDL /		
	Techniques like KOH	Tutorials		
	preparation, Tzanck			
	smears, Salt split			
	examination			
9.	Surgical assessment and	Practical's	20	
	procedures for cutaneous	/ theory/		
	and adnexal neoplasms Pre	SDL		
	operative, Post operative			
	and Emergency			
	identification and			
	management			
10.	Record maintenance	Practical's	2	
	Participate in Quality	/ theory/		
	assurance and internal	SDL		
	audit programmes Ethical			
	standards			
11.	Noninfectious	Practical's	1	
	Erythematous, papular and	/ theory/		

	squamous diseases	SDL		
12.	Vascular Disorders	Practical's	1	
12.	vasculai Disolueis	/ theory/	Ι Ι	
		SDL		
13.	Noninfectious	Practical's	6	
15.	Vesiculobullous and	/ theory/		
	Vesiculopustular Diseases	SDL		
14.	Connective Tissue Diseases	Practical's	2	
		/ theory/	_	
		SDL		
15.	Cutaneous Toxicities of		1	
	Drugs	2		
16.	The Photosensitivity	Practical's	1	
	Disorders	/ theory/		
		SDL		
17.	Disorders associated with	Theory/ SDL	1	
	physical agents: Heat,	/ Tutorials		
	Cold, Radiation and Trauma			
18.	Non infectious Granulomas	Practical's	1	
		/ theory/		
		SDL		
19.	Degenerative Diseases and	Practical's	1	
	Perforating Disorders	/ theory/		
		SDL		
20.	Cutaneous manifestations	Theory/ SDL	1	
	of nutritional deficiency	/ Assignment		
	states and			
	Gastrointestinal Disease			
21.	Metabolic Diseases of the	Practical's	1	
	Skin	/ theory/		
		SDL		
22.	Inflammatory Diseases of	Practical's	3	
	Hair follicles, Sweat	/ theory/		

	Glands and Cartilage	SDL		
23.	Inflammatory Diseases of	Practical's	2	
	the Nail and Subcutaneous	/ theory/		
	Fat	SDL		
24.	Infections including	Practical's	5	
	Bacterial, Viral, Fungal	/ theory/		
	Protozoan and Parasitic	SDL		
	Infestations, including			
	(STD and HIV)			
25.	Congenital Diseases	Practical's	2	
	(Genodermatoses)	/ theory/		
		SDL		
26.	The Histiocytoses	Practical's	2	
		/ theory/		
		SDL		
27.	Pigmentary Disorders of	Practical's	2	
	the Skin	/ theory/		
		SDL		
28.	Benign Pigmented Lesions	Practical's	4	
	and Malignant Melanoma	/ theory/		
		SDL		
29.	Tumors and Cysts of the	Practical's	4	
	Epidermis	/ theory/		
		SDL		
30.	Tumors of the Epidermal	Practical's	4	
	Appendages	/ theory/		
		SDL		
31.	Cutaneous Lymphomas and	Practical's	4	
	Leukemias	/ theory/		
		SDL		
32.	Tumors of Fibrous Tissue	Practical's	2	
	Involving the Skin	/ theory/		
		SDL		

2.2		- · · · · · · · · · · · · · · · · · · ·	4	
33.	Vascular Tumors: Tumors	Practical's	4	
	and Tumor-like conditions	/ theory/		
	of Blood vessels and	SDL		
	Lymphatic's			
34.	Tumors with Fatty,	Practical's	1	
	Muscular, Osseous and	/ theory/		
	Cartilaginous	SDL		
	Differentiation			
35.	Tumors of Neural Tissue	Practical's	2	
		/ theory/		
		SDL		
36.	Metastatic Carcinoma of	Practical's	2	
	the Skin	/ theory/		
		SDL		
	Total		160	10

S	Practical Syllabus	Number	Credits
no		of	
		hours	
1.	All the components mentioned in the	320	10
	syllabus will b e addressed during slide		
	reporting and performing procedures and		
	special stains		

S	Clinical Syllabus	Number	Credits
no		of	
		hours	
1.	Dermatology OPD session	100	3
2.	Minor OT Procedures	60	2

3.	Major Surgical skills	80	2.5
4.	Emergency, Pre and Post operative	80	2.5
	management		
		320	10
	Total		

S	Assignments/ Projects/ Self-Study	Number	Credits
no		of hours	
1.	Self study	100	3
2.	Short term projects (3 months)	140	4.5

S	Assessment method	Mark	E	ligibility
no	(FORMATIVE)	allotmen	t re	equirement
1.	Assignment marks	20	50)% in each
				category
2.	Portfolio	20		
3.	Project	20		
4.	Test marks	40		
	Total	100	50)% in each
				category
3.	Assignments	80)	2.5

S	Assessment method	Maximum	Eligibi
no	(SUMMATIVE)	marks	lity
			require
			ment
1.	Final Theory exam	100	50% in
2.	Practical & clinical	80	Both
3.	Viva	20	Theory

Total	100	and
		Practic
		als

S	Reference Books/ Journals
no	
1.	Lever histopathology of skin, 10 th edition, David E.Elder
2.	Weedon's Skin Pathology, MD Dr. Patterson James W. 4 th
	edition
3.	Rook's Textbook of Dermatology, 9th edition, Wiley Blackwell
4.	Fitzpatrick's Dermatology, 9th Edition by Sewon Kang
5.	Handbook of Leprosy 5th edition by W.H.Jopling &
	A.C.Mcdougall
6.	Dermatopathology: Foundations in Diagnostic Pathology, 2nd
	edition by Klaus J. Busan
7.	Dermatological Diseases: A Practical Approach, 2 nd edition,
	Mysore Venkaaram
8.	The Washington Manual of Dermatology Diagnosis , by M.
	Laurin Council
9.	IADVL Color Atlas Of Dermatopathology by Mahajan Pradeep
10.	Comprehensive Dermatologic Drug Therapy: Expert Consult -
	3rd edition by <u>Stephen E Wolverton</u>
11.	Differenial diagnosis in dermatology y Ackerman Fourth
	edition\

Pattern of Assessment:

Formative Evaluation		Summative Evaluation	
Component	Weight	Component	Weight
Assignment	20	Final Theory	100
marks		exam	

Portfolio	20	Practical &	80
Project	20	clinical	
Test marks	40	Viva	20
Total	100	Total	200

Pass Requirements: Minimum 50 % in each category

*Suggested that formative assessment sufficient awaiting approval of academic council to enable uniformity in all fellowship course of university

Course Requirements and Eligibility criteria for Examination:

- ▶ 80 % of attendance
- Completion of all competencies including histopathological ,surgical skill and clinical exposure in mentioned hours
- > Completion of short term projects
- Publishing one original article / one case report in indexed journal
- > Extramural postings whenever required
- > Other molecular training postings
- ➤ Forum presentation (one poster and one oral presentation in CME / conferences)
- > E-Portfolio
- ➤ Monthly Theory/Clinical/Practical tastes satisfactorily performed.

<u>Goals&Objectives</u>:

Training in Dermatopathology will impart complete clinical and diagnostic acumen, which will enable them to handle both facets of the specialty and will thereby ensure comprehensive patient management.

Specific Learning Objectives:

Patient Care:

- Attend daily Dermatology opd in the morning (9:00 12:00) over the entire year.
- ➤ Each fellow is responsible for previewing and generating specific diagnosis or an appropriate differential diagnosis on all slides that are available the day before.
- Review Histopathology, special stain and immunohistochemistry slides daily in the afternoon session over the entire year
- Review immunofluorescence cases with the dermatopathology faculty weekly.
- ➤ Become knowledgeable in the morphologic features of inflammatory and neoplastic changes in skin and soft tissue specimens and develop diagnostic proficiency and generate appropriate differential diagnoses when morphologic changes are not etiologically specific.
- Undergraduate theory and practical teaching for relevant topics and peer teaching for post graduates of both departments.
- > Understand the importance of turn-around time and the need to provide patients and clinicians with timely reports.
- > Attend all tumor boards of dermatopathology to integrate pathology findings into the management of patients with these tumors.

➤ Attend all Diagnostic Conferences in the Department of Dermatology to learn the importance of Clinicopathologic correlation in improving patient care.

Medical knowledge, Interpersonal and Communication Skills & Professionalism

- > The fellow will understand normal anatomy and function of structures in the skin and soft tissue.
- The fellow will become knowledgeable in the morphologic features of inflammatory and neoplastic changes in skin and soft tissue specimens and develop diagnostic proficiency and generate appropriate differential diagnoses when morphologic changes are not etiologically specific.
- ➤ Over the course of the year, fellow should e familiar with common concepts of Lever's Histopathology of the Skin textbook.
- ➤ During the initial 6 months of the program, the dermatopathology fellows are expected to read the Atlas of Immunofluorescence in Dermatology . This will reinforce the principles of immunofluorescence .
- > The fellow will understand the appropriate use of histochemical and immunohistochemical stains.
- ➤ The fellow will understand the appropriate use of molecular diagnostic techniques in diagnostic dermatopathology.
- > The fellow is expected to participate in the teaching of dermatopathology to residents
- ➤ The fellow will develop excellent communication skills so that diagnostic and prognostic information can be conveyed clearly to patients and their attenders.

➤ The fellow will discuss the findings of patient biopsies with the pathology residents on service prior to signout.

> The fellow will provide clinical teaching to medical students, fellow residents, and residents from other departments

> The fellow will use information technology to perform his/her duties and access medical information online to support his/her own education.

> The fellow will participate in a minimum of two journal club presentations, in a month which will reinforce the principles of self-directed learning and evidence-based practice.

> The fellow will use feedback from faculty to improve his/her practice.

> The fellow will understand the appropriate settings for biopsies and excisions of skin lesions and the most appropriate site to biopsy for a given lesion and clinical differential diagnosis.

The fellow will also attend other cutaneous surgery clinics and have the opportunity to perform biopsies and/or excisions, which is highly encouraged.

Exposure to frozen sections and other procedures like KOH preparation, Tzanck smear and salt split examination

> Understand the significance of the research project and how it impacts patient care

➤ Short term projects will be given and compulsory for the course completion

Model Theory Exam Paper

Duration: 3 hrs

Answer all questions

Total

Marks 10x10 = 100

- 1. Describe various types of skin biopsies and their indications in various disease processes.
- 2. Describe the role of direct and indirect immunofluorescence in intra epidermal bullous lesions of the skin
- 3. Explain clinicopathological spectrum of leprosy
- 4. Mention various granulomatous conditions of the skin and Explain about tuberculoid granulomas in skin
- 5. Describe dermatopathology of cutaneous auto inflammatory syndromes
- 6. Describe the differential diagnoses of cutaneous clear cell neoplasms and explain different modalities to establish the diagnosis
- 7. Describe the utility of FISH in diagnosis of cutaneous mesenchymal tumours
- 8. Describe the clinicopathological spectrum of Syphilis
- 9. Explain the role of stem cell markers and their potential application in diagnostic dermatopathology
- 10. Role of CD markers in cutaneous neoplasm

Components of Model Practical Examination :

- 1. Clinical cases (10x3 = 30 marks)
- **2.** Case scenario and interpretation (2x5=10)
- 3. Histotechniques section cutting, H&E staining, special stain (10 marks)
- **4.** Pathology slides (10 dermatopathology) (10x2 = 20 marks)
- **5.** IF/IHC/special stain interpretation two (2x5= 10 marks)