



**PRAVARA INSTITUTE OF MEDICAL SCIENCES
(DEEMED TO BE UNIVERSITY)**

Loni, Tal. Rahata, Dist. Ahmednagar 413736
NAAC Re-accredited with 'A' Grade

SYLLABUS

**Fellowship Programme - Neuro Radiology (Dept. of Radiodiagnosis)
(Academic Council Meeting Dated 20th March, 2019)**

TOPIC

Fellowship in Diagnostic Neuro-Radiology

INTRODUCTION & OBJECTIVE

Awarded by: Pravara Institute Of Medical Sciences(DU) (accredited by NAAC with 'A' GRADE)

Program Highlights:-

- A one year comprehensive and well-balanced training program encompassing all the subjects in Diagnostic neuroradiology.
- The fellow receives "hands-on" experience at the workstation as well as through active procedure services
- The program provides advanced training in all neuroimaging modalities including conventional MRI and CT, as well as advanced neuroimaging like MR perfusion, MR spectroscopy, diffusion tensor imaging, arterial spin labeling, MR CSF flow study, functional MRI, MRA and MRV, CT perfusion, CT angiography and venography.
- Fellows receive comprehensive training in all aspects of adult and pediatric neuroimaging, head and neck imaging.
- Fellows will be given an opportunity to conduct/participate in at least one original research study during the course duration
- Oral/Poster presentation as part of course syllabus at a local/regional/national/international meeting

DURATION OF COURSE

1 year

ELIGIBILITY

- Applicant possesses either a degree or diploma/DNB qualification in Radiodiagnosis.
- Applicant is registered with Maharashtra/State Medical Council/MCI and possesses additional qualification registration certificate or has applied for the same.

INTAKE CAPACITY

Three (3) Students per Academic year

FEE STRUCTURE

The candidate will be asked to pay Rs.1,50,000/- by Demand draft in favor of Pravara Institute of Medical Sciences, with prescribed application form at the time of admission towards the Fellowship in Diagnostic Neuro-Radiology. They will be paid salary/stipend as per the pay scale of senior Resident Rs. 80,000/-

COURSE CONTENT / TOPICS / LEARNING METHODS

MRI sessions

Reporting scans and reviewing them with consultant including

Brain

Spine

Head and neck

Advanced neuro-imaging: MR perfusion, MR spectroscopy, diffusion tensor imaging, arterial spin labeling, functional MRI, MRA and MRV.

Responsible for:

- Guiding technologist in planning the scan
- Tailoring the scan protocol in the given clinical scenario
- Reviewing scans for optimum image quality
- Responsible for managing emergency add-ons
- Making special films demonstrating positive findings in interesting cases
- Ensuring quality and adequacy of all films provided to clinicians
- Patient counseling.

CT (CNS / H&N component) sessions

- weekly

- reporting scans for

- brain

CTA COW / Perfusion

Sinuses

Head and neck

Spine

Topics for Discussion Includes:

1. Congenital Malformations of the Brain and the Skull
2. Inborn errors of metabolism
3. Cerebrovascular diseases and Malformations
4. Adult demyelinating, metabolic and toxic encephalopathies
5. Supratentorial tumors
6. Pineal Region Tumors
7. Sellar and Parasellar Tumors
8. Infratentorial Tumors
9. Tumors of the Meninges
10. Head Trauma
11. Hydrocephalus
12. Intracranial Infections
13. Toxic and Metabolic Disorders
14. Neurodegenerative Disorders of the Central Nervous System including parkinson plus, dementias, etc.
15. Spine and Spinal Cord Tumors

AVAILABLE MACHINES AND EQUIPMENTS

1.5 T Super Conductor MRI
 128 Slice CT Scan with Syngovia Software and CO2 Insufflators for virtual imaging
 10 color Doppler machines of Toshiba, Philips and Mindray
 Digital X-ray with IITV
 PACS
 Updated Central & Departmental Library with Latest Books, Journals & Reading Hall
 Film Library with All types of Cases in films and CD's
 Well Equipped seminar room with AV aids and LCD projector

PROJECT WORK

Seminar presentation
 Case Presentation
 Journal Club

Paper presentation:- The candidate will be encouraged to attend conferences and workshops and to present as many papers at these conferences.

Publications:- All facilities will be given to acquire and record data to send articles for publications in journals of national and international repute. Each candidate will be encouraged to send in at least one article for publication in a certificate course.

LOG BOOK

Student will have to maintain a log book

SCHEME OF EXAMINATION

Practical Oral examination: 100 marks

COURSE COMMENCES

1st September

REFERENCE FOR THE BOOK**Books (latest edition)**

1. Grainger & Allison's Text book of Diagnostic Radiology (Churchill Livingstone)
2. Textbook of Gastrointestinal Radiology- Gore and Levine (Saunders)
3. MRI of Brain and Spine - Scott Atlas (LWW)
4. Diagnosis of Diseases of the Chest -Fraser
5. Diagnostic Imaging Series: (Amirsys, Elsevier)
 Abdominal Imaging, Orthopedics, Head and Neck, Neuroradiology, Pediatric Radiology Chest, Obstetrics, Breast
6. MRI in Orthopedics and Sport Injuries - Stoller
7. Skeletal Radiology - Greenspan
8. Abdominal-Pelvic MRI - Semelka (IWW)
9. Caffey's Pediatric Radiology
10. CTI and MRI of the whole body- John R. Haaga
11. Text Book of Radiology and imaging - Davod sulton
12. Diagnostic ultrasound - Carol C. Rumack
13. AIIMS-MAMC-PGI's Comprehensive Textbook of Diagnostic Radiology, Volumes 1, 2, 3

Journals

1. American Journal of Roentgenology
2. Radiology
3. Seminars in Ultrasound, CT, MRI
4. Radiographics
5. Clinical Radiology
6. British Journal of Radiology
7. Radiological Clinics of North America
8. Pediatric Radiology
9. Australasian Radiology
10. Journal of Computerized Axial Tomography
11. Clinical Imaging
12. MR Clinics of North America
13. Seminars in Roentgenology

**Pravara Institute of Medical Sciences
Deemed University (DU),Loni
Department of Radiodiagnosis, Rural Medical College
At Po-Loni,Tal-Rahata,Dist-Ahmednagar,413736**

APPLICATION FORM FOR ADMISSION TO FELLOWSHIPPROGRAMME

RECENT
PASSPORTSIZE
PHOTOGRAPH

I desire to take admission for the Fellowship Program in _____ at Pravara Institute of Medical Sciences Loni. I hereby apply for the same. If permitted to join the course, I shall abide by all the rules and regulations of the University. I hereby furnish my Bio-data.

Date of Application _____ Date of Receipt _____

(By Office) Signature of Applicant

1. Name(in capitals) : _____
(Surname) (First Name) (Middle Name)
2. Father's Name : _____
3. Mother's Name : _____
4. Age : _____ Gender: _____
5. Date of Birth : _____
6. Postal Address for Correspondence: _____
7. _____
8. Telephone No. : _____ Mobile No. : _____
(with Area Code)
9. E-mail ID : _____
10. Nationality : _____

11. Educational Qualification:

EXAM	MONTH AND YEAR OF PASSING	NAME OF UNIVERSITY	% MARKS OBTAINED
M.B.B.S			
M.D			
DMRE			
OTHERS			

Registration No. : _____

Name of State Medical Council : _____

Country : _____

City : _____

A-State/National/International Conference Attended:

Year	Place	State/National/International

B-Papers Presented as first author at State/National/International Conference:

Year	Place	Title

C-Papers Published in any recognized Journal / chapters in textbook/ articles

Name of the Publication	Year	Vol. No.	Page No.	Title of the Paper/chapter/article

To be filled by the University Office

Serial No. _____ Date when applicant & payment received _____

Amount Rs. _____ by cash/ cheque /Draft _____

Receipt No. _____ Date _____

Date when application is approved _____

Remarks _____

Manager Accounts PIMS

DECLARATION:

I hereby agree that I will abide by the rules and regulations at present in force or that may hereafter be made for the administration of Pravara Institute of Medical Sciences Deemed University (DU), Loni and undertake that so long as I am a fellow / certificate course student of the university, I will do nothing unworthy of the student of the university either inside or outside or anything that will interfere with its orderly working and discipline. I also declare that the information particulars furnished above by me are true to the best of my knowledge. I know the consequences as provided in the rules of PIMS with regard to furnishing false information/concealing any information.

Date: __

**Signature of
Applicant**

