



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

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

SYLLABUS

**Post Doctoral Fellowship in Body Imaging (Dept. of Radiodiagnosis)
(Academic Council Meeting Dated 25th August, 2022)**

TOPIC

Fellowship in Body Imaging

INTRODUCTION & OBJECTIVE

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

Program Highlights:-

1. A one year comprehensive and well-balanced training program encompassing all of the basic and advanced clinical areas of Pediatric & adult abdominal and pelvic imaging.
2. The fellow receives "hands-on" experience at the workstation as well as through active procedure services with image-guided aspirations and biopsies.
3. Fellows fully participate in all aspects of clinical services, with frequent contact with our referring physicians; will work side by side with nationally acclaimed academic radiologists, and will interact with renowned clinicians.
4. Fellows on rotations interpret MR and CT exams of the chest, abdomen, and pelvis with attending radiologists in the section.
5. Rotations include inpatient CT, outpatient CT, body MRI, cardiac MRI and cardiac CT.
6. Experience in more specialized CT techniques including CT cerebral angiography, CT coronary angiography, 3D CT, etc.
7. Fellows are to be involved in a variety of MR studies including abdominal and pelvic imaging like cardiac MRI, MRCP, etc.
8. Fellows will be responsible for developing CT/MR protocols as well as for using the workstations to create both MR and CT 3D reconstructions.
9. There are several multidisciplinary conferences weekly or every other week that are staffed by Body Imaging section faculty.

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

- **The candidates will be posted for the following rotational duties -**

Inpatient CT:

Complex inpatient postoperative and oncology cases, as well as emergency department cases are read on this rotation. Our clinicians routinely visit the body fellows in our inpatient reading room for opinions, which results in a rich understanding of the patient behind the scan. In addition CT guided biopsies are performed.

Interventions:

- Radiofrequency ablation.
- Microablation.
- Endovascular laser ablation therapy
- Percutaneous transhepatic Biliary drainage
- Nephrostomy.

Imaging-guided Biopsies:

Image-guided biopsies and drainages are performed with intervention radiology division. You will round on patients with IR service as a key and integral part of their team.

Inpatient USG:

You will see a wide variety of complex inpatient, oncology, and emergency department cases, including gynecology and first-trimester studies, on this rotation. In addition, ultrasound-guided renal biopsies and lymph-node biopsies are performed.

USG guided procedures:

Ultrasound helps guide non-invasive procedures. You can use ultrasound to locate and examine fluid collection in tendons, muscles, cysts and soft-tissue masses. Includes procedures: Thoracocentesis, paracentesis, cyst aspiration, USG guided abscess drainage and Hysterosonography.

MSK imaging:

The core of this course is based on an intensive review of the anatomy of the specific regions, pathophysiology of common conditions within these regions and evidence based reviews of the use of MSK USG in the assessment of locomotor system. Various MSK interventions-

- Aspiration of cysts, abscesses and hematomas.
- Arthrocentesis.
- Treatment of calcified tendinitis.
- MSK biopsy
- Diskography
- Percutaneous treatment of Osteoid osteoma.

Body MR:

The body MR service sees a wide variety of pathology with a relatively high volume of body MR cases, including cirrhotic and HCC liver studies, MRCP, hepatobiliary pathology, gynecologic imaging, urologic imaging and rectal MR.

Cardiovascular Imaging:

The cardiovascular service images all cardiac CT, pulmonary CT (PE CT), and peripheral vascular CT and MR. Three-dimensional imaging with the latest volume-rendering software is a fundamental part of the rotation, and you will become adept at using a wide variety of 3D software to help you in your diagnostic acumen by the end of your rotation. Cardiac MR is also expected to start very soon.

AVAILABLE MACHINES AND EQUIPMENTS

PHILIPS Ingenia Elition 3.0 T 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

Evaluation:-

Term end examination will be arranged and conducted by Dept. of Radiodiagnosis, Dr. Balasaheb Vikhe Patil Rural Medical College and declare the result.

Examination Scheme

Paper – I: Post Doctoral Fellowship in Body Imaging – I

Paper – II: Recent advances in Post Doctoral Fellowship in Body Imaging

Theory Examination:- (2 Paper of 100 marks each)

2 LAQ x 20 Marks = 40 Marks

6 SAQ x 10 Marks = 60 Marks

Practical Examination:-

One Long Case / Long experiments = 50 Marks

Three Short Cases (3 x 30) = 90 Marks

Viva Voce / Oral / OSPE / Spottes = 60 Marks

Minimum Passing:-

- i) Minimum 50% in Theory papers (Each paper minimum is 40%)
- ii) Minimum 50% in Practical / Clinical & Viva Voce
- iii) Overall 50% Theory & Practical/Clinical

Award of class:-

50% to 59.5% = IInd class

60 to 74.5% = Ist Class

Above 75% = Ist Class with Distinction

Attempts:-

- A student shall clear the Examination only within three attempts or within 4 years of admission.
- Result / Issue of Mark Sheet – Head of Institute & HOD will jointly issue the Mark Sheet.

Certification:-

- A) Title – Post Doctoral Fellowship in Body Imaging.
- B) A fellowship is awarded upon successful completion of the prescribed study program, which will state that i) Candidate has completed the prescribed course of Post Doctoral Fellowship in Body Imaging, ii) Candidate has completed prescribed clinical experience. iii) Candidate has passed the prescribed examination.
- C) Certificate will be issued with the signatures of concern Dean, Dr. Balasaheb Vikhe Patil Rural Medical College & Vice-Chancellor, Pravara Institute of Medical Sciences (Deemed to be University).
- D) Certificates to be prepared by concern College.

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 - Davodsulton
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. Telephone No.(with area code) _____ MobileNo. : _____
8. E-mail ID : _____
9. Nationality : _____
10. 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




Registrar
Pravara Institute of Medical Sciences
(Deemed to be University)
Loni-413736, Tal Rahata, Dist. Ahmednagar
(M.S. India)