

NOTIFICATION



**Sri Ramachandra Medical Centre**  
**Department of Pathology**

**The Department of Pathology, Sri Ramachandra Medical Center is pleased to announce the admission to Fellowship Programme in Perinatal Pathology**

**Course Details:**

**1. Fellowship in Perinatal Pathology**

**Qualification**

: MD / DNB  
(Pathology)

**Number of seats**

: 2 Per year (Jan-June, July-Dec)

**Course Duration**

: 06 months

**Course Fee**

: Rs. 60,000 (Rupees Sixty thousand only)  
+ Applicable GST

**Stipend**

: **Non-stipendiary**

Training timings : 8 am to 4 pm

Attendance Requirement for exit examination : 90%

Last date for submitting Application 15<sup>th</sup> Nov For January session and May 15<sup>th</sup> for July Session.

Date of written test and interview will be intimated to the candidates via email by November end for January session and May end for July session.

Course commences on January 1<sup>st</sup> for session one and July 1<sup>st</sup> for session two every year.

Those interested may kindly submit the prescribed application form to below address

Address for communication :

Dr. Sandhya Sundaram

Prof & Head

Department of Pathology

Sri Ramachandra Medical Centre

Porur, Chennai – 600 116.

Phone – +919444187687 ( 8 to 4 pm)

Email : [pathconference@sriramachandra.edu.in](mailto:pathconference@sriramachandra.edu.in)

**NOTIFICATION**



**Sri Ramachandra Medical Centre**  
**Department of Pathology**

**The Department of Pathology, Sri Ramachandra Medical Center is pleased to announce the admission to Fellowship Programme in Nephropathology**

**Course Details:**

**1. Fellowship in Nephropathology**

**Qualification**

: MD / DNB  
(Pathology)

**Number of seats**

: 2 Per year (Jan-June, July-Dec)

**Course Duration**

: 06 months

**Course Fee**

: Rs. 60,000 (Rupees Sixty thousand only)  
+ Applicable GST

**Stipend**

: **Non-stipendiary**

Training timings : 8 am to 4 pm

Attendance Requirement for Exit examination : 90%

Last date for submitting Application 15<sup>th</sup> Nov For January session and May 15<sup>th</sup> for July Session.

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**SRI RAMACHANDRA MEDICAL CENTRE**  
Porur, Chennai - 600 116.  
**DEPARTMENT OF PATHOLOGY**

**APPLICATION FORM (Jan-June/July-Dec)**

Affix your latest  
colour Passport  
size photograph  
here.

**(Note:** Please fill in each column in your own handwriting and put a tick mark (✓) wherever necessary and strike off the portion not applicable. Incomplete application form will not be accepted).

1. PERINATAL PATHOLOGY    
2. NEPHROPATHOLOGY

**(TICK ONE FELLOWSHIP ONLY )**

1. a) Name of the candidate (AS PER PROVISIONAL / DEGREE CERTIFICATE IN BLOCK LETTERS)	Dr.
b) Expand the initials	
c) Complete address (with District, State & PIN CODE) to which communication is to be sent	
d) Phone No. with STD Code	Residence : Mobile : E-mail ID :
2. a) Father's Name Contact Details	Mobile : E-mail ID :
b) Mother's Name Contact Details	Mobile : E-mail ID :
c) Husband's Name Contact Details	Mobile : E-mail ID :
3. Gender	Male <input type="checkbox"/> <input type="checkbox"/> Female <input type="checkbox"/> <input type="checkbox"/>

4. a) Date of birth and age	DD/MM/YYYY	Age:
b) Place of birth, District and State	:	
5. Qualifying examination passed. (Self attested Photocopy of the Degree certificate and Statement of Marks of all examinations to be enclosed)	Name of PG Degree : University Regn. No : Month : Year :	
6. a) Name and address of the Medical College where qualified	UG ..... ..... PG ..... .....	
b) Whether the College and course is recognized by the Medical Council of India.	Recognised	<u>Not Recognised</u>
7. Details of Permanent Registration with the Medical Council incorporating PG qualification (Photocopy to be enclosed)	State : Regn. No.: Date :	

**8. Papers Presented :**

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## 9. Papers Published :

( if necessary attach separate sheet )

## **DECLARATION BY THE CANDIDATE**

I declare that the information furnished by me herein are true and correct. In case any information furnished herein is found to be incorrect or any document is found to be not genuine, I agree to forego my claim for admission and abide by the decision of the Sri Ramachandra Medical Centre authorities.

I further declare that I have read the prospectus furnished with the application form fully and understood the contents therein clearly and I hereby undertake to abide by the conditions prescribed therein. I undertake to abide by the Rules and Regulation of Sri Ramachandra Medical Centre.

Place:

Signature of the candidate

Date:

Name \_\_\_\_\_

Online Applications ( with attachments ) can be sent to:

**pathconference@sriramachandra.edu.in**

## **FELLOWSHIP PROGRAMME IN PERINATAL PATHOLOGY**

**SRI RAMACHANDRA MEDICAL CENTRE**  
Porur, Chennai - 600 116

### **INTRODUCTION:**

The Perinatal Pathology Unit under the Department of Pathology, has been functioning for the past ten years. It is well equipped with a specially designed autopsy table, appropriate instruments and weighing scales required for fetal autopsies. It is also equipped with reporting software for proper workflow, easy archiving. The Perinatal Pathology Unit has performed over 1,000 fetal autopsies in the past five years. The cases include anomalies of all systems including Cardiac, Skeletal, Respiratory, Renal and Central Nervous system.

The Departments of Pathology, Obstetrics and Gynaecology, Neonatology, Genetics and Fetal Medicine are actively involved in creating a multidisciplinary approach towards each case with regular monthly Perinatal Pathology meets. These meets are attended by faculty from all the above departments to discuss cases of importance with an insight regarding the further counselling of the parents after the autopsy report.

**What is the need for Perinatal Pathology in India?** The incidence of congenital anomalies has been found to be on the rise which may partly be attributed to the emergence of the subspeciality of Fetal Medicine (with or without invasive procedures). The increasing public awareness through the Internet and the media also maybe a cause.

Fetal medicine has been recognized as a subspeciality at many centres with fellowship courses and Anomaly scans have gained prime importance for the parents during a pregnancy. This has led to detection of lethal congenital anomalies at an early gestational age providing an option of termination to the parents. The next important question from the parents is “will the same anomaly arise in our next baby too?” This is where our role as a perinatal pathologist assumes importance to predict the recurrence risk with the findings on Autopsy. The same will reflect on the quality of life of the neonates and their parents.

**Routine Diagnostic Histopathology training** does not include Fetal and Perinatal Pathology as a regular component. So the need for specialised training

in this field. The unit is staffed by a trained Perinatal pathologist and two assistants.

### **AIM OF THE COURSE:**

- To acquire specialized knowledge in all aspects of Perinatal Pathology and Placental Pathology.
- To acquire training in clinical, technical, diagnostic and theoretical knowledge of fetal autopsies and placental pathology.

### **Objectives of the course:**

1. To understand the basic procedure of fetal autopsy.
2. To develop expertise on the different methods of fetal autopsy.
3. To study and correlate the placental findings
4. To develop an integrated approach towards formulating a complete autopsy report involving the other disciplines of fetal medicine
5. To identify anomalies and understand counselling, need for invasive testing and protocols of care of the anomalous and non anomalous fetus
6. To understand the basics of genetic counselling.

**Number of seats:** 2 per academic year

## **REGULATIONS FOR FELLOWSHIP PROGRAMME IN PERINATAL PATHOLOGY**

### ***ELIGIBILITY***

*Candidate for admission to the Fellowship Program in Perinatal Pathology shall be required to possess the following qualifications:*

- (a) He/she must have qualified for the M.D. Pathology from any recognized institution of this University or of any other University recognised as equivalent there to by the authority of this University and the Medical Council of India and obtained permanent registration from any of the State Medical Councils.
- (b) The admitting authorities of the Medical center will strictly ensure that every candidate admitted to the Fellowship Programme in Perinatal Pathology has obtained permanent registration certificate from any one of the State Medical Councils.

### ***REGISTRATION***

A candidate admitted to Fellowship Programme in Perinatal Pathology of Sri Ramachandra Medical Centre, Porur, Chennai-600116, shall register his/her name with the Medical Centre by remitting the prescribed fees along with the application for registration duly filled in and forwarded to the Medical Director.

### ***DURATION OF THE COURSE***

- (a) The period of certified study and training for the Fellowship Programme in Perinatal Pathology shall be six months for the award of Fellowship certificate.
- (b) No exemption shall be given from the period of study and training.

### ***ATTENDANCE REQUIREMENT FOR ADMISSION TO EXAMINATION***

No candidate shall be permitted to appear for the Examination unless he/she puts in 90% attendance during his/her period of study and training and produces the necessary certificate of study, attendance and progress from the Course Director.

## ***CONDONATION OF LACK OF ATTENDANCE***

There shall be no condonation of lack of attendance for Fellowship Programme students.

## ***TRAINING IN OUTSIDE CENTRES***

The Head of the Department shall make necessary arrangements for the fellowship candidates to undergo training for elective postings in other centres within the State, not exceeding a total period of two weeks.

## **NUMBER OF APPEARANCES**

A candidate registered for the Fellowship Programme in Perinatal Pathology must qualify in the examinations within three consequent attempts from the date of his/her admission, failing which he/she shall be discharged from the course.

## ***MAINTENANCE OF LOG BOOK***

1. Every Fellow shall maintain a record of skills he/she has acquired during the six months training period certified by the Head of Department under whom he/she has undergone training.
2. The Fellow should also be required to participate in the teaching and training programme of postgraduate students.
3. In addition, the Head of the Department shall involve their Fellows in Seminars, Journal Club, Group Discussions and participation in Clinical, Clinico-Pathological conferences.
4. Every Fellow should be encouraged to present short title papers in conferences and to make improvements on it and submit them for publication in reputed medical journals.
5. The Head of the Departments shall scrutinise the logbook once in every three months.
6. At the end of the course, the candidate should summarise the contents and get the logbook certified by the Head of the Department.
7. The logbook should be submitted at the time of clinical/practical examination for the scrutiny of the Board of Examiners.

## **Award of Certificate**

Certificate will be awarded duly signed by Head of the Department & Medical Director of Sri Ramachandra Medical Centre. This programme does not come under the purview of MCI and is not an additional registerable qualification.

## **Scheme of training programme**

### Protocol for training

1 <sup>st</sup> week	Orientation to the Department
2 <sup>nd</sup> to 4 <sup>th</sup> week	Techniques of autopsy
5 <sup>th</sup> to 6 <sup>th</sup> week	Approach to anomalous fetus autopsy
7 <sup>th</sup> to 8 <sup>th</sup> week	Approach to still birth fetus and intrauterine death
9 <sup>th</sup> to 12 <sup>th</sup> week	Placenta grossing and histopathology
13 <sup>th</sup> to 16 <sup>th</sup> week	Anomalies of the Cardiovascular system, Respiratory system and Central Nervous system
17 <sup>th</sup> to 18 <sup>th</sup> week	Skeletal dysplasias, Renal anomalies
19 <sup>th</sup> week	Posting in Radiology Department
20 <sup>th</sup> week	Posting in Neonatology and Genetic counseling
21 <sup>st</sup> week	Posting in Fetal medicine Department
22nd to 23 <sup>rd</sup> week	Research and paper presentation
24 <sup>th</sup> week	Overview of the entire course

## **SYLLABUS**

At the end of the fellowship the trainee will be expected to have in-depth knowledge in the following areas:

### **1: Basic Sciences**

1. Early conceptus growth and adaptations of pregnancy
2. Normal embryonic and fetal development and placentation
3. Fetoplacental perfusion and transfer of nutrients
4. Endocrinology of pregnancy and the placenta

### **2: Fetal Developmental Biology**

5. Fetal lung development and amniotic fluid analysis
6. Fetal cardiovascular physiology and response to stress conditions
7. Fetal endocrinology
8. Fetal hematology

### **3: Variations in Embryonal and Fetal growth and development**

9. Sporadic and recurrent pregnancy loss
10. Ectopic and heterotopic pregnancies
11. Multifetal pregnancies:
12. Biology of normal and deviant fetal growth

### **4: Fetal Infections and Teratogenesis**

13. Developmental toxicology, drugs, and fetal teratogenesis
14. Drugs, alcohol abuse, and effects in pregnancy
15. Teratogenic viruses
16. Transplacentally acquired microbial infections in the fetus

### **5. Genetics**

17. Principles of human genetics: chromosomal and single gene disorders
18. Genetic counseling in prenatal and perinatal medicine

### **6. Pathology diagnosis**

19. Various methods and approach to fetal autopsy
20. Placental grossing and Histopathology
21. Diagnosis of central nervous system malformations

22. Diagnosis of thoracic and cardiac abnormalities
23. Diagnosis of Gastrointestinal and genitourinary anomalies
24. Fetal skeletal anomalies
25. Open neural tube defects and Chromosomal anomalies
26. Pathology of Stillbirths and Intrauterine deaths

## 7. **Maternal Diseases Complicating Pregnancy**

27. Hypertensive diseases in pregnancy
28. Cardiac and pulmonary diseases in pregnancy
29. Diabetes mellitus in pregnancy
30. Endocrine disorders in pregnancy
31. Gastrointestinal diseases complicating pregnancy
32. Liver disease in pregnancy
33. Pregnancy complicated by renal disorders
34. Neurological disorders in pregnancy
35. Thromboembolic disorders of pregnancy
36. Coagulation and hematological disorders of pregnancy
37. Maternal alloimmunization and fetal hemolytic disease
38. Rheumatologic and connective tissue disorders in pregnancy

### **A. Continued personal development:**

- i. Computer literacy and familiarity with commonly used systems.
- ii. Critical approach to information gained from literature review and audit.
- iii. Preparation of manuscripts and teaching materials.
- iv. Oral presentation skills.
- v. Time management skills.
- vi. “Reflective practice” skills – learning and creating knowledge by personal reflection.

### **B. Research**

- i. Innovative approach to clinical problems.
- ii. Willingness to assess evidence on which to base practice.
- iii. Understanding of research methodology, including the randomized controlled trial.
- iv. Attendance at research orientated national meetings.
- v. To have undertaken a defined piece of academic research, which has led to publication in a peer reviewed journal.

### **Evaluation :**

Final Examination – University  
Theory and Practical viva ( will be defined later).

## Fellowship Programme in Nephropathology

Renal pathology is a highly specialized field which needs rigorous training as it involves intricate clinic-pathological knowledge in diagnosing medical renal and transplant biopsies. We propose to offer this 6 months exclusive training, post MD/DNB Pathology for specialization in this field.

### HIGHLIGHTS OF THE PROGRAM:-

- **Duration of Course :** 6 months
- **No of Candidates:** Two per year
- **Eligibility:** M.D / DNB Pathology from MCI recognized Institution
- **Mode of Selection:** MCQ exam and interview
- **Course fees :** Rs 60000/-
- **Stipend :** Non Stipendiary
- **Training timings :** 8 am to 4 pm.

### AIM AND OBJECTIVES:-

- The fellowship program will enable the resident to acquire knowledge in various medical renal diseases and transplant biopsies.
- Interpretation of slides by Immunofluorescence, Immunohistochemistry and electron microscopy.
- The academic structure of the course will involve
  1. Routine screening of Medical renal biopsies
  2. Observing tissue processing by LM/ IF
  3. Observing renal biopsy procedure
  4. Participation and presentation in Nephropathology meets and CME
  5. Short topic presentation
  6. Slide seminars
  7. Journal clubs
  8. Skill in ancillary techniques

The resident will spend significant time in directed, focused self-study followed by review sessions to maximize learning during this rotation.

## **TRAINING PROGRAM**

The following postings will be covered during the course:-

- Renal pathology (Light microscopy, histochemistry, immunofluorescence, immunohistochemistry)
- Clinical pathology
- Transplant immunology (HLA typing)\*
- Biochemistry
- Microbiology
- Nephrology
- Urology ( Transplantation procedure )
- Electron microscopy\*

(\* two weeks training at outside lab/ institute having EM facilities will be arranged)

### **Teaching and Learning activities :-**

<b>Month</b>	<b>1<sup>st</sup> week</b>	<b>2<sup>nd</sup> week</b>	<b>3<sup>rd</sup> week</b>	<b>4<sup>th</sup> week</b>
Jan/July	Introduction/Technical procedure (LM/Spl Stains)	Technical Procedure (IF/IHC)	Urine Examination – Clinical pathology	Nephrology
Feb/Aug	Surgical pathology posting (LM/IF)	Biochemistry	Surgical pathology posting (LM/IF)	Transfusion medicine
Mar/Sept	Electron microscopy	HLA Transplant& Immunology	EM/HLA Transplant	Surgical pathology posting (LM/IF- Transplant)
April/Oct	Cytology	Surgical pathology posting (LM/IF)	Microbiology	Surgical pathology posting (LM/IF)
May/Nov	Urology & Solid organ transplant	Surgical pathology posting (LM/IF)	Surgical pathology posting (LM/IF)	Surgical pathology posting (LM/IF)
June/Dec	Clinical Pathology	Nephrology	Transfusion medicine	Surgical pathology posting (LM/IF)

## **SYLLABUS**

**Modules covering the following topics are designed for the fellowship**

1. Basics of Renal Pathology
2. Routine and Ancillary techniques
3. Glomerular pathology
4. Tubulointerstitial and Blood vessel Pathology
5. Transplant Pathology

### **Eligibility for final examination**

- Oral/Poster presentation in national conference(ISRTP)
- Attendance – 90%
- 75% marks in the internal test knowledge & skill assessment
- Up to date log book maintenance
- One paper communicated during the course

### **Assessment & Certification**

- **Formative evaluation:** Diagnostic skill on routine cases. Log book maintenance, Nephro Pathology case discussion, conference paper presentation, OSPE, posting feedback ,Journal reading
- **Summative evaluation :** At the end of the course - theory paper, Viva &Practicals
- **Course certification :** As per University policy decision

**Interested Candidates can submit CV to :**

Dr. Sandhya Sundaram  
Prof & Head  
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Porur, Chennai – 600 116