Post Doctoral Certificate Course (PDCC) in Oncopathology

AMRITA INSTITUTE OF MEDICAL SCIENCES (AIMS), KOCHI

DEPARTMENT : PATHOLOGY
1. **Period of course**: One Academic Year

2. **No of Candidates**: Two per year

3. **Eligibility**

   **Essential**: MD/DNB Pathology from MCI recognized Institution

   **Desirable**: Preference will be accorded to:

   1. Experienced candidates
   2. Candidates with presentations (oral/poster) and publications in indexed journals
   3. Be able to present a research proposal at the time of application and also at the interview.

4. **Mode of Selection**:

   **Selection exam**

   Based on written MCQ based entrance examination/ slide test , viva and interview.

5. **Stipend**

   Candidates are eligible for stipend as per the prevailing rule. Resident should give a refundable deposit in the beginning of the course. No refund will be available if any resident quits the course in midway.

6. **Training Program**

   Training programme will be of one academic Year. It will be a full time program in surgical oncopathology. Short postings in cytology and molecular biology with optional postings in oncology are also included in the curriculum.

   **CORE Syllabus**

   - Grossing: approach and basis for all radical specimens
   - Intraoperative consultations (Frozen sections) under supervision with consultants
   - Approach to small biopsy reporting
   - Reporting of all radical specimens (RCPath/CAP guidelines)
- Cytology: one month with special focus on non palpable lesions including EUS/EBUS.
- Interpretation of ancillary diagnostics like special stains, IHC including all panels
- Basic Molecular Biology techniques and application in present diagnostic scenario
- Participation in clinicopathological meetings, weekly tumour board/multidisciplinary meetings.
- Teaching - pathology PG residents, undergraduate medical and dental students.
- Laboratory quality assurance and management
- Writing of research papers
- Support for Publications: minimum 2 papers

7. **Feasibility of the program**

PDCC in Oncopathology is a specialized structured post-doctoral training program. Department of Pathology, Amrita Institute of Medical sciences was started in the year 1998 and now, it handles over 18000 biopsies in an year with complete work – up of the biopsies including panel of over 90 IHC markers for all the biopsies. After the start of the oncology center in 2004, the department has been successfully handling all biopsies. Tumor boards and clinico-pathology conferences(CPC) are held regularly for discussion and correlation of biopsy and clinical findings. There are over 14 faculty members working in department at any given time. Faculty regularly and actively participate in the National and International CMEs. In 2009 and 2019, department organised National CME in Pathology under auspices of Kerala state chapter of IAPM at Amrita Institute of medical sciences and were co hosts for workshops arranged for Annual IAPM conference in 2015. In addition, the department has been organising yearly CME, Amrita annual Pathology Update(AAPUD) since 2017 and monthly online CME(Series of Amrits Guru E lectures, SAGE) since September 2020. The laboratory services are NABL accredited since 2007.

**Faculty Guides:**

1. Dr Indu R Nair, MD Pathology, Hon. observership in Lymphoma Pathology (Imperial College, UK)
2. Dr Bindhu MR, DCP DNB Pathology, Hon observership in Neuropathology, NIMHANS
8. **Academic Teaching and research Activities** :-

The candidate is expected to fulfill the following academic, clinical and research criteria while training:

**Academic:** The Department is doing speciality reporting, since 2013 with a lead pathologist in each subspeciality. The fellow will be posted with the lead in each subspeciality on a rotational basis. He/She is expected to actively participate in seminar, journal clubs, group discussions and case presentations during the departmental postgraduate teaching meeting, on a monthly basis. The trainee will also be involved in the interdepartmental CPC conferences held with other clinical departments along with presentations in all tumor boards. (rotational basis). He/she will be encouraged to present paper/poster in the regional/ national/ international pathology conferences.

**Weekly multidisciplinary meetings**

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<tr>
<th>Day</th>
<th>Subject</th>
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<tr>
<td>Tuesday</td>
<td>Neurosurgery</td>
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<td></td>
<td>Hematooncology</td>
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<tr>
<td></td>
<td>urology</td>
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<tr>
<td>Wednesday</td>
<td>Gynecology</td>
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<td></td>
<td>Head and Neck</td>
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<tr>
<td>Thursday</td>
<td>Breast</td>
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<td></td>
<td>GI, Liver</td>
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<td>Friday</td>
<td>Lung</td>
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**Monthly Clinicopathological Meet**

<table>
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<tr>
<th>Day</th>
<th>Subject</th>
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<tbody>
<tr>
<td>First wednesday</td>
<td>Orthopedics</td>
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<tr>
<td>Second wednesday</td>
<td>Endocrine</td>
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<td>Fourth wednesday</td>
<td>GIT</td>
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<tr>
<td>Fourth saturday</td>
<td>Pediatrics</td>
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**Clinical:** The candidate is expected to gross all specimens including radical specimens from all superspeciality departments. The candidate will be involved in all system
intraoperative consultations (Frozen sections). Reporting of FNA cytology with special emphasis on guided FNA will be part of the regular work.

Also they will be actively involved in the work up of in-house and submitted consultation cases, with increasing independence as the fellowship progresses. As part of the work up, the trainee will be expected to appropriately use ancillary tests (Special stains, IHC, molecular studies) for disease characterisation, prognostication and theuperatic personalised decisions.

Research: The candidate will engage in both independent and collaborative research. The independent research will involve selecting a research project(s) to pursue under the supervision of the faculty guide. The trainee will prepare research proposals and with ethics committee approval, participate in activities such as tissue procurement, review of archival material, compile and analyze the data from these studies, and prepare abstracts/manuscripts for submission to scientific meetings/journals. The candidate will also actively participate in the collaborative projects (UG, PG and interdepartmental) as per need and directions of the guide.

9. Aims and objectives of the course:

Fellowship Objectives:

The primary objectives of the fellowship:

1. To train fellows with the aim to become familiar with diagnostic aspects of tumor diagnosis and understand workup with immunohistochemistry and molecular panel to provide comprehensive report.

2. To provide a clear, complete and concise pathology report encompassing all the minimum points relevant to diagnosis, prognosis and therapeutics.

3. To interact with clinicians, participate in tumor boards and conduct clinicopathological meetings.

4. Fellows will be encouraged to engage in research projects, publish papers and present at national and international meetings.
Opportunities for career advancement:

In the ever increasing demand of Pathology clinical support in the era of personalized medicine and molecular diagnostics, the fellowship will prepare the candidate for the demands of the new times. This will hold him good for careers in histopathology sections of large diagnostic laboratories and also as faculty in pathology in academic medical institutions, corporate hospitals and stand alone oncology centers.

10. **Eligibility for appearing in the Examination:**

- The candidate will have to conduct a research proposal and present it at any of the conferences of Pathology (IAPM – State/National).
- The candidate will be encouraged to publish the results
- Each candidate has to attend periodic internal assessment conducted by the faculty of the department.
- The candidate is expected to maintain a log book of daily activities
- The candidate must have atleast 80% attendance.

11. **Evaluation:**

Assessment in the domains of Knowledge, Skills and Attitude relevant to the subspecialty.

**Formative Assessment:**

- Case based discussions (CBD)
- Direct observation of practical skills (DOPS)
- Evaluation of clinical events
- Multisource Feedback (MSF)

**Other tools for assessment:**

a. Log book maintenance
b. Research/audit activity
c. Presentations/Discussions

**Summative assessment:** Written, practical & viva at the end of training

**Final Examination –under ICP**
Theory: One paper of 100 marks (3 Hour duration)
(MCQ:20 Marks and Theory 8 short notes/essays :80 marks)
General Pathology, Systemic tumor Pathology, Recent advances in Tumor Pathology and Techniques including Molecular Pathology

Practical examination will consist of Practical & Viva voce. (200 marks, including 30 marks for research project)

Modules: Slide test: short (include cytology cases) and Long cases (include IHC slides)
Frozen examination
Grossing examination
Viva Voce
Evaluation of Research Project –(30 marks)

Evaluation will be done by 2 examiners

Internal Examiner – 1                   External Examiner – 1
Theory – 100 marks
Practical and VIVA – 200 marks

Total - 300 marks