

Post Doctoral Certificate Course (PDCC) in CLINICAL INFECTIOUS DISEASE

Department of General Medicine, AIIMS, Nagpur

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1. Goal:

In view of increased burden of infectious diseases, the proposed one-year post MD training will be targeted for the physicians who are actively involved in the management of infectious diseases.

2. AIM and OBJECTIVES:

AIM: To train physicians in becoming specialized in infectious diseases and to provide them expertise in the field of infectious diseases.

OBJECTIVES:

- a. To provide advanced training in clinical infectious disease management.
- b. To enhance knowledge and skills in diagnosing and managing infectious diseases.
- c. To foster critical thinking and problem-solving abilities in managing complex infectious disease cases.
- d. To promote research and academic excellence in clinical infectious disease.
- e. To provide thorough knowledge about the epidemiology and control of hospital infections.
- f. To apply syndromic approach in appropriate diagnosis and treatment
- g. To educate regarding implementation of an effective antimicrobial stewardship program.
- h. To enhance skills in decision-making and multidisciplinary collaboration.

3. COURSE DETAILS:

- a. **Name of the course:** Post Doctoral Certificate Course (PDCC) in Clinical Infectious Disease
- b. **Duration:** One-year full time course
- c. **Number of seats:** As per rules and norms laid by the Institute.
- d. **Eligibility:** The course is open for candidates holding the following degrees- MD/DNB (General/Internal Medicine), MD/DNB (Pediatric) and MD/DNB (Pulmonary Medicine) from the recognized Institution. Candidates must have completed a recognized residency program and hold valid registration with the State Medical Council/NMC.
- e. **Mode of Selection:** Through all India open entrance test, conducted by the Institute.
- f. **Selection process:** The examination will have written test and viva voce. The written examination will be based on multiple choice questions drawn from General Medicine and Microbiology in relation to infectious diseases. Candidates securing more than 50% marks in written test will be asked to appear for departmental viva-voce examination which will judge

the clinical aptitude, decision making ability and problem-solving potential. This will follow the Institute's rules applicable to other PDCC courses.

g. Course Faculty: Faculty of General medicine and Microbiology.

h. Tuition fees: As applicable

i. Emolument: As applicable to Senior Residents.

j. Syllabus/ Competencies: It will be module based syndromic approach to infectious disease training program. The candidate must understand the pathophysiology, construct a differential diagnosis and apply the appropriate prophylactic and therapeutic interventions in the common infections. This list is not comprehensive.

Clinical Course will include the Epidemiology, diagnosis, pathogenesis, clinical features management and preventive aspects of the following infective conditions:

PUO

Bacteremia & fungemia.

Acute Febrile illness including exanthematous fevers

Tropical fevers

HIV/AIDS

Tuberculosis

Acute respiratory infections-Upper and lower.

CNS infections: Encephalitis/Meningitis/Brain abscess

Acute and chronic diarrhea, gastroenteritis.

UTI, sexually transmitted Infections and Reproductive tract infections.

Ear and Eye, soft tissue and bone infections

Zoonosis

Vector borne diseases

Hospital acquired Infections: CAUTI, BSI CLABSI, SSI, VAP, HAP etc.

Sepsis, septic shock, sepsis care bundle.

Infections in immunocompromised Patients-Cancer, AIDS, transplant recipients, Geriatric population, diabetics etc.

Antifungal/ Antimicrobial prophylaxis during neutropenia & immunodeficiency.

Antibiotic stewardship.

Hospital infection control practices

Adult vaccination

Techniques to be observed

S. No.	Department	Techniques
1.	Pathology	Focus on-Diagnosis/Identification of microbes in histologic sections
2.	Biochemistry	Immunology, PCR
3.	Radio diagnosis	Ultrasound guided aspirations
4.	Pharmacology	Antibiotic usage
5.	Microbiology	Bacteriology/Virology/Mycology- diagnostic procedure. Serology, immunology, molecular biology, Staining techniques, Culture techniques Identification Tests, Antibiogram profile

Techniques to learn and perform during Laboratory Posting in Department of Microbiology

Sr. No.	Department	Techniques to learn and perform
1.	Bacteriology, Anaerobic	Staining techniques Culture techniques Identification tests Antibiogram HICC Surveillance activities- Anaerobic Culture techniques Automated analyzers: BACTEC, MALDI-TOF
2.	Serology Immunology	Automated ELISA: HBsAg, HIV, HCV, TORCH, Total IgE, HAV, HEV, Anti CCP, Scrub Typhus Rapid tests, Autoimmunity profile Immuno-Fluorescent assays, Allergy testing-skin prick test, ICTC

3.	Mycology Mycobacteriology	KOH mount and other microscopic techniques Fungal culture media Slide culture Antifungal Susceptibility ZN smear examination –conventional and modified CB NAAT Conventional solid culture and MGIT for Mycobacteria
4.	Parasitology	Peripheral blood smear for hemoparasites Newer rapid diagnostic techniques
5.	Molecular Biology	PCR DNA hybridization Gene sequencing Microarray system-Bio-fire
6.	Virology	Tissue culture and other methods of virus isolation and diagnosis Molecular diagnosis

4. ACADEMIC & TEACHING/LEARNING PLAN: The teaching and learning methodology below include but is not limited to, Lecture, discussion, student-directed learning, and Case-Based Learning, Clinical Case Discussions, Morbidity-Mortality Discussion, Audit presentation, Lectures, Seminars and Journal Clubs, Presentation of progress report on the research projects, Simulation Laboratory, Joint inter-departmental academic meets with radiology, microbiology etc. and Departmental Clinical Meetings, Grand Rounds and Clinico-Pathological Meetings and Multi-departmental Joint academic activities.

Formal Teaching:

Journal Club: Paper presentation/discussion

Seminar: Once every month

Lecture/discussion: Lectures on newer topics by faculty, as per need.

Case presentation in the ward. Candidate will present a clinical case for discussion before a faculty, and discussion made about its diagnosis and treatment.

Combined Round/Grand Round: These exercises will be done for the hospital once a month involving presenting unusual or difficult cases. Presentation of cases in clinical

combined/grand rounds and clinical series/research data for the benefit of all clinicians and other related disciplines.

Bedside clinical training: Bedside patient case discussions during ward rounds with faculty.

Posting: 10 months in General Medicine and allied IPD ward and two months in the Microbiology department. In addition, the candidate will be posted for 7 days each in the departments of Pathology, General Surgery and Radiodiagnosis. The posting of IPD (General Medicine) would include ward round, bedside discussions in General Medicine wards and MICU. Candidate will also be posted for short duration in other specialties like Nephrology, Urology, Gastroenterology, Neurology and Hematology.

Clinical Posting Roster for PDCC Clinical Infectious diseases

S. No.	IPD/OPD/Department	Duration
1.	General Medicine	7 Month
2.	MICU	1 Month
3.	ART center	21 days
4.	Microbiology Department	2 Month
5.	Pulmonary Medicine	15 days
6.	General Surgery	7 days
7.	Radiodiagnosis	7 days
8.	Pathology	7 days

LOG BOOK: Candidate shall maintain a log book of the work they carry out and the training program they undergo during the training. Log book shall be checked and assessed periodically by the faculty members imparting the training.

The Department would encourage **e-learning activities**.

The candidate has to attend conference/workshops/CME on topics related to infectious diseases. Candidate is expected to do a basic research project related to his work in infectious disease at AIIMS, Nagpur. He will be allotted a guide for the same in the beginning of the course. Topic of the project and research cell and IEC permission should be obtained early during the course preferably within first three months.

5. ASSESSMENT:

The candidates are expected to maintain a logbook of 25 clinical case reports of the patients

diagnosed and treated for infectious diseases in the hospital. In addition, each candidate will undergo **pre-professional assessment** by the faculty of the department following Institute's procedure in this regard.

At the end of 12 calendar months there will be a **Professional examination comprising of a theory (one paper) and practical examination**. Theory paper will have 100 marks. (10 LAQs of 10 marks each). Practical examination will consist of practical cases & viva voce. The practical will have the following:

Long case (1)	50 Marks
Short Case (1)	25 Marks
Spotting (5 spots)	10 Marks
Viva	15 Marks

Candidates will be declared successful in the course only after securing a minimum of 50% marks. Theory and practical examinations must be passed separately.

Examiners: Institute rules will be followed.

A minimum of 75% attendance is compulsory for appearing in the Professional examination.

6. RECOMMENDED READING

Textbooks in Infectious disease

1. Mandell, Douglas and Bennet's Principles and Practice of infectious diseases, 7th edition, Elsevier health.
2. Infectious diseases. Eds. D Armstrong and J Cohen, 5th Edition. Elsevier health.
3. AIDS Therapy. Eds. Raphael Dolin, Henry Masur, Michael Saag. 3rd Edition. Elsevier health.
4. Harrison's principles of Internal Medicine 21st edition, McGraw-Hill

Other Study materials

1. Infectious disease management guidelines by Infectious Disease Society of North America (IDSA) published on their website www.idsociety.org
2. Infectious Diseases of the Respiratory Tract. Edition: Michael Ellis, Cambridge University Press. 1998.
3. Gerald Mandell, John Bennett, Raphael Dolin. Infectious Diseases, 7th edition, Churchill Livingstone Elsevier, 2010, Volume I and II

Journals

- a) Current Opinion in Infectious Diseases
- b) Infectious Diseases in Clinical Practice

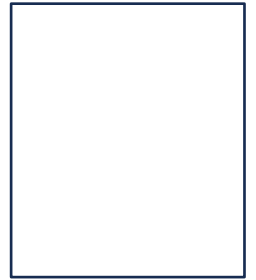
- c) Lancet
- d) NEJM
- e) American Journal of Respiratory and Critical Care Medicine
- f) Journal of trauma-injury, infection in Critical Care
- g) Clinical Infectious Disease,
- h) International Journal of Infectious diseases,
- i) Emerging Infectious diseases,
- j) Infectious disease update from New England Journal of Medicine (NEJM),
- k) Lancet Infectious disease,
- l) Infectious disease clinics of North America (IDCNA)

LOGBOOK



DEPARTMENT OF GENERAL MEDICINE ALL INDIA INSTITUTE OF MEDICAL SCIENCES NAGPUR

Personal details:



Name of the student:

Date of admission to PDCC:

Date of beginning of the PDCC:

Reg: No. (College ID)

Reg. No. (University ID)

Permanent Address:

E mail ID:

Mobile Number:

CERTIFICATE

This is to certify that the candidate Mr/ Ms....., Reg No.
....., admitted in the year 2025-2026 in the PDCC course -----
-----at General Medicine department, All India Institute of Medical Sciences,
Nagpur has satisfactorily completed / has not completed all assignments /requirements
mentioned in this logbook during the period from toHe /
she is / is not eligible to appear for the summative assessment.

Signature of Faculty

Name and Designation

Countersigned by Head of the Department

Dean of the College

Place: Nagpur

Date:...../.../2026

POSTING PERIOD:

Sr. No.	Department /Unit	Period (from-to)	Days	Signature of Faculty
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				

Lectures

Sr No	Date	Topic	Faculty

Journal club

Sr No	Date	Journal club topic	Journal/ Issue	Presenter	Signature of supervisor

