

CURRICULUM:

1. M.D. Emergency Medicine

Teaching

The Post Graduate Program in Emergency Medicine (MD) at consists of a three-year curriculum, divided into 36 clinical modules that will cover the breadth of emergency medicine. In post-graduation, teaching will be directed towards protocol as well as skill-based management of acute and life-threatening situations. The postgraduate residents in emergency medicine will be rotated to various departments as well as Trauma Center for further clinical exposure, the details of which are mentioned in. Learning in Emergency Medicine will be both self-directed and also through frequent rounds, formal lectures and discussions. Self-directed education will take place while working in various areas. Formal sessions will be meant to facilitate and supplement the efforts of the students and would consist of the following. In addition to the overall curriculum structure, each resident will receive a monthly set of clinical and educational assignments and responsibilities.

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| ➤ Journal Club | Twice in a week |
| ➤ Seminar | Twice in a week |
| ➤ Mortality, morbidity & audits | Once a week |
| ➤ Basic and Advanced Life Support | Once in a month |
| ➤ Simulation | Twice a month |
| ➤ Grand rounds | Once a week |
| ➤ Follow up case discussions on patients admitted through the emergency department | Once a week |

The primary textbook will be ***Emergency Medicine: A Comprehensive Study Guide 8th edition*** edited by Judith E. Tintinalli. In addition, ***Rosen's Emergency Medicine: Concepts and Clinical Practice*** will serve as a supporting textbook, and ***Clinical Procedures in Emergency Medicine*** by James R. Roberts and Jerris Hedges will be used to teach necessary procedures in the emergency department. Each module will end with a post-test to measure the residents' level of comprehension and mastery of the materials during the module session. These educational experiences will include one-hour morning seminars with an emphasis on case-based teachings that will focus clinical management issues. The residents will be given or themselves present a clinical scenario, and then the instructor will lead the residents through a discussion that includes: developing a differential diagnosis, ordering appropriate laboratory and radiology diagnostic tests, finding the diagnosis, and managing and treating the clinical problem.

In addition, residents will be required to initiate and conduct a research project or comprehensive topic review pertinent to emergency medicine, and they will be encouraged to write a scholarly article that is

worthy of publication. The residents will be expected to work on a research project with the faculty, and they will be encouraged to submit one abstract or oral presentation at a medical conference. The residents should also each submit one paper to a journal for potential publication. Finally, successful graduation for each resident will require the completion of a thesis paper that may be based on the resident's research presentations or published articles.

Residents required to complete mandatory courses BLS, ACLS, PALS, ATLS, AUTLS, ECG course, Suturing and Splinting course, Advanced Airway, Mechanical Ventilation, Medical Photography, Fire Safety, Neonatal Resuscitation Course, Hand Hygiene, Occupational Hazard and Evidence based medicine.

At the end of three years, a high standard of expertise will be expected from the postgraduates. A high level of expertise would be required to be obtained in various emergency procedures.

Patient Care

The patient care is expected to improve drastically, as motivated and well-trained faculty, residents, nursing staff and paramedics will look after them. The academic Junior Residents will work under direct supervision of faculty and senior residents. This will ensure quality and evidenced-based emergency care to sick patients. Our residents will have rotational duties in trauma center and other departments.

Research activities

Specialty of Emergency Medicine cares for acutely sick and injured patients. Research in Emergency Medicine addresses the most basic issues in clinical medical care. An urban emergency department provides a broad array of medical services. Research in this setting can identify fundamental issues of health care delivery and can improve the quality of emergency care for patients.

The Emergency Department represents an extremely fertile environment for prospective research that can directly impact patient care. This "laboratory" has, thus far, been underutilized. Academic department status will enable the faculty to collaborate with other specialists to study the acute phase of all manner of medical and surgical disease.

The postgraduates would be trained to design and undertake research protocols. They will be given topics related to the specialty of Emergency Medicine as a part of their thesis, which will give new impetus to research activities in this field. Residents from other Departments will be encouraged to conduct research in this field under the supervision of the faculty of the Department of Emergency Medicine. In addition, the faculty of Emergency Medicine will be actively involved in conducting individual as well as collaborative research.

International Collaboration

Department will also collaborate with emergency medicine department across the globe for its research activities, faculty development and resident rotation.

2. PDCC (Emergency and Trauma anaesthesia)

The primary goal of the fellowship is to provide a "hands-on" clinical experience in all aspects of perioperative trauma care, including:

- a) Prehospital assessment and transport
- b) Preoperative emergency room evaluation and stabilization
- c) Operative trauma anaesthesia care
- d) Postoperative critical care and pain management

The educational program will be divided into modules

1. Trauma Physiology, Coagulation and Management

A combination of self-directed learning, didactic lectures, teaching opportunities & practical skills development, including point-of-care coagulation testing

2. Perioperative point of care Ultrasound

3. Non-technical Skills in Trauma and Critical Events: Short courses and mentorship in the management of critical incidents involving teamwork and soft skills

4. Professionalism & Leadership – Inside and Outside the OR

5. Advanced Trauma Diagnostics & Procedures

Coursework in Trauma Radiology (CT/X Ray). Dedicated hands-on experience in the Emergency Department performing diagnostic ultrasound and FAST scans.

6. Simulation in Healthcare: Instructing on multiple simulation courses for various educational levels. Development and implementation of own simulation sessions with a focus on trauma for AIIMS anaesthesia residents.

7. Disaster management: This will involve didactic lectures, table top drills and webinars with

8. Quality Improvement: The Fellow will engage in a yearlong project focusing on an area of improvement for the Trauma centre with a focus on emergency surgery and trauma. The potential projects include – fasting times for emergency surgery; Post-Operative Analgesia; Blood Transfusion management and more in the OR.

9. Research: The fellows will join in existing projects. They will have an opportunity to write or contribute to data collection, analysis, or write up. The specific exposure will depend on current project status. Fellows will have an opportunity to participate in hypothesis generation, but are unlikely to complete a full project within the scope of their fellowship year.

The fellows will be rotated in various specialties like Trauma, neurosurgery OT, Pain, Intensive care unit, intensive trauma unit and more for in depth learning.

In addition to the overall curriculum structure, each resident will receive a monthly set of clinical and educational assignments and responsibilities.

They will be evaluated monthly after completion of each module.

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| ➤ Journal Club | Once in a week |
| ➤ Seminar | Thrice in a week |
| ➤ Mortality, morbidity & audits | Once a week |
| ➤ Basic and Advanced Life Support | Once in a month |
| ➤ Simulation | Twice a month |

Log book will be maintained to chart important skills learnt, assisted and conducted alone