Jagannath Gupta Institute of Medical Sciences & Hospital

ELECTIVE PROGRAM BATCH 2022-23

ELECTIVE BLOCK 1			
Name of Elective	**Department**	**Name of Preceptor**	**No. of students**
Preparation of museum specimen	**Anatomy**	**Dr. Rajarshi Datta**	**5**
Anatomy model making	**Anatomy**	**Dr Anasuya Adhya/ Dr Mousumi Banik**	**5**
Learning Radiological Anatomy	**Anatomy**	**Dr. Koushik Ray**	**4**
Preceptor mediated research	**Anatomy**	**Prof. Dr. Rajasri Chunder**	**2**
Histology: preparation of tissue for microscopic examination	**Anatomy**	**Prof. Dr. Rajasri Chunder**	**4**

Elective 1: Preparation of museum specimen

Name of Block	**Block 1**
Name of Elective	**Preparation of museum specimen**
Location of hospital Lab or research facility	**Dept. of Anatomy, JIMSH**
Name of internal preceptor(s)	**Dr. Rajarshi Datta**
Name of external preceptor (if any)	**N/A**
Learning objectives of elective	**1. To dissect viscera from cadaver** **2. To mount and label the viscera for display** **3. To make museum portfolio**
Number of students that can be accommodated in this elective	**5**
Prerequisites for elective	**Basic knowledge of Human Anatomy. Universal precautions and Good laboratory practice modules to be completed**
Learning Resources for students	**Departmental handbook provided**
List of activities in which the student will participate	**1. Work daily with a supervisor in departmental Museum to prepare museum specimen** **2. Update the museum portfolio** **3. Participate in departmental education activities**
Portfolio entries required	
Log book entry required	**Successful completion of the posting as certified in the log book with a "meets expectation 'M' grade**
Assessment	**Formative: attendance;** **day-to-day participation in departmental activity;** **Presentation of work**
Other comments	

Elective 2: Anatomy model making

Name of Block	**Block 1**
Name of Elective	**Anatomy model making**
Location of hospital Lab or research facility	**Dept. of Anatomy, JIMSH**
Name of internal preceptor(s)	**Dr Anasuya Adhya/ Dr Mousumi Banik**
Name of external preceptor (if any)	**N/A**
Learning objectives of elective	**1.to better understanding of anatomy** **2. to develop skill of construction of structures from deep to superficial plane.**
Number of students that can be accommodated in this elective	**5**
Prerequisites for elective	**Basic knowledge of Human Anatomy.** **Interest in arts and crafts**
Learning Resources for students	**Departmental handbook provided**
List of activities in which the student will participate	**1. Work daily with a supervisor in department** **2. Participate in departmental education activities**
Portfolio entries required	
Log book entry required	**Successful completion of the posting as certified in the log book with a "meets expectation 'M' grade**
Assessment	**Formative: attendance;** **day-to-day participation in departmental activity;** **Presentation of the work done**
Other comments	

Elective 3: Learning Radiological Anatomy

Name of Block	**Block 1**
Name of Elective	**Radiological anatomy**
Location of hospital Lab or research facility	**Dept. of Anatomy, JIMSH**
Name of internal preceptor(s)	**Dr. Koushik Ray**
Name of external preceptor (if any)	**N/A**
Learning objectives of elective	**1. Recognize and identify structures on imaging studies** **2. Describe the anatomic configuration of the structures in relation to other nearby structures, as learned in gross anatomy**
Number of students that can be accommodated in this elective	**4**
Prerequisites for elective	**Basic knowledge of Human Anatomy and radiology**
Learning Resources for students	**Textbook of radiological anatomy**
List of activities in which the student will participate	**1. Work daily with a supervisor in department** **2. Participate in departmental education activities**
Portfolio entries required	
Log book entry required	**Successful completion of the posting as certified in the log book with a "meets expectation 'M' grade**
Assessment	**Formative: attendance;** **day-to-day participation in departmental activity;** **Assesment by preceptor with plates**
Other comments	

Elective 4: Preceptor mediated research

Name of Block	**BLOCK 1**
Name of Elective	**Craniofacial Morphometry and Headache Predisposition Across Age Groups- Preceptor mediated research**
Name of internal preceptor(s)	**Dr. Rajasri Chunder**
Name of external preceptor (if any)	**N/A**
Learning objectives of the elective	**1. To understand craniofacial surface anatomy and identify standard anthropometric landmarks in living subjects.** **2. To perform craniofacial morphometric measurements using calipers and/or standardized photography.** **3. To study anatomical variation of craniofacial dimensions across different age groups (students and faculty/staff).** **4. To correlate craniofacial morphometric indices with self-reported headache patterns and frequency.** **5. To learn basic research methodology including informed consent, data collection, data entry, and simple statistical analysis.** **To interpret anatomical data in relation to predisposition to common clinical conditions (headache disorders).**
Number of students that can be accommodated in this elective	**2**
Prerequisites for the elective	**Basic knowledge of Human Surface Anatomy**
Learning resources for students	**Standard Anatomy textbooks (Surface anatomy & head–neck region)** **Demonstration of craniofacial landmarks by faculty** **Validated headache questionnaire** **Guidance on data entry and basic statistical analysis**
List of activities in which the student will participate	**1. Identification of craniofacial anatomical landmarks (nasion, zygion, subnasale, etc.)** **2. Measurement of craniofacial dimensions (facial width, facial height, fWHR, etc.)** **3. Recording demographic details and headache history of participants** **4. Comparison of craniofacial measurements between students and faculty/staff** **5. Data entry in spreadsheet format** **6. Basic statistical analysis and interpretation of results** **7. Preparation of summary findings / poster / report**
Portfolio entries required	**• Daily log of participants examined and measurements taken** **• Reflection on learning of surface anatomy and anthropometry** **• Data collection sheets duly filled** **• Summary of observations and preliminary analysis**
Log book entry required	**Successful completion of the posting as certified in the log book with a "meets expectation 'M' grade**
Assessment	**Formative: attendance;** **-Day-to-day participation, punctuality -Accuracy of anatomical landmark identification** **-Quality of data collection and record keeping** **-Understanding of anatomy–clinical correlation**
Other comments	

Elective 5: Histology: preparation of tissue for microscopic examination

Name of Block	**Block 1**
Name of Elective	**Histology techniques**
Location of hospital Lab or research facility	**Histology Lab., Dept. of Anatomy, JIMSH**
Name of internal preceptor(s)	**Dr Rajasri Chunder/ Dr Arpita Layek**
Name of external preceptor (if any)	**N/A**
Learning objectives of elective	**1. Steps of tissue processing** **2. To make Paraffin block** **3. To Prepare of slides for microscopic examination** **4. To know the basic staining like H/E staining**
Number of students that can be accommodated in this elective	**4**
Prerequisites for elective	**Basic knowledge of Human Anatomy. Universal precautions and Good laboratory practice modules to be completed**
Learning Resources for students	**Book: Bancroft's Theory and Practice of Histological Techniques**
List of activities in which the student will participate	**1. Work daily with a supervisor in observing, assisting and performing tissue processing, paraffin block making, staining** **2. Participate in departmental education activities**
Portfolio entries required	
Log book entry required	**Successful completion of the posting as certified in the log book with a "meets expectation 'M' grade**
Assessment	**Formative: attendance;** **day-to-day participation in departmental activity;** **performance of assigned tasks**
Other comments	

ELECTIVE BLOCK 1			
Name of Elective	**Department**	**Name of Preceptor**	**No. of students**
Evaluation of Liver Function Tests, generation of reports and clinical Correlations.	**Biochemistry**	**Dr.Shramana Ghosh Dr. Abhira Deb**	**8**
Hormone assay through Modern Chemiluminescence Immuno Assay and report analysis.	**Biochemistry**	**Dr. Abhijit Saha Dr. Unmesana Kakati**	**8**

Elective 1: Evaluation of Liver Function Tests, generation of reports and clinical Correlations.

Name of Block	**Block 1**
Name of Elective	**Evaluation of Liver Function Tests, generation of reports and clinical Correlations**
Location of hospital Lab or research facility	**JIMSH Central Laboratory(Biochemistry)**
Name of internal preceptor(s)	**Dr.Shramana Ghosh** **Dr. Abhira Deb**
Name of external preceptor (if any)	**Nil**
Learning objectives of elective	**1) To classify different patients with abnormal Liver Function Tests** **2)Find out the commonest type of jaundice detected during the specified time period.**
Number of students that can be accommodated in this elective	**8**
Prerequisites for elective	
Learning Resources for students	**Biochemistry and medicine books, Biochemical reports in the lab.**
List of activities in which the student will participate	**.Collection and preparation of blood samples.** **Functioning of auto-analyzer.** **Data analysis and evaluation of reports**
Portfolio entries required	**Data collected daily to be entered** **Analysis of the data at the end of posting**
Log book entry required	**Findings of the study to be entered daily**
Assessment	**At the end of the posting by the preceptor, whether meets the expectation or not**
Other comments	

Elective 2: Hormone assay through Modern Chemiluminescence Immuno Assay and report analysis.

Name of Block	**Block 1**
Name of Elective	**Hormone assay through Modern Chemiluminescence Immuno Assay and report analysis.**
Location of hospital Labor research facility	**JIMSH Central Laboratory(Biochemistry)**
Name of internal preceptor(s)	**Dr. Abhijit Saha** **Dr. Unmesana Kakati**
Name of external preceptor (if any)	**Nil**
Learning objectives of elective	**1) To differentiate different types of thyroid abnormalities.** **2) To find out the commonest type of thyroid dysfunction in our hospital in a given period of time**
Number of students that can be Accommodated in this elective	**8**
Prerequisites for elective	
Learning Resources for students	**Teitz textbook of clinical chemistry and Medicine Textbooks , Ability to differentiate between hypothyroid and hyperthyroid reports.**
List of activities in which the student will participate	**1) Collection and preparation of blood samples.** **2) Operation of immunoassay machine** **3) Evaluation of Thyroid function tests and other immunoassay**
Portfolio entries required	**Data collected daily to be entered** **Analysis of the data at the end of posting**
Log book entry required	**Evaluation of daily reports to be entered.**
Assessment	**At the end of the posting by the preceptor, whether meets the expectation or not**
Other comments	

ELECTIVE BLOCK 1			
Name of Elective	**Department**	**Name of Preceptor**	**No. of students**
Interpretation of normal ECG and diagnosis of common rhythm abnormalities	**Physiology**	**Prof. Dr. Arnab Sengupta Dr. Julfa Khatun Dr. Aparajita Ray DR. Tanusree Nath**	**5**
Measurement and interpretation of dynamic lung volumes using computerised spirometry	**Physiology**	**Dr. Aparajita Ray Dr. Saswati Ray Dr. Julfa Khatun Dr. Anisha Dutta**	**5**
Determination of Arneth Count, Measurement of RDW and their application in diagnosis of common haematological disorder	**Physiology**	**1. Prof. Dr. Arnab Sengupta 2. Dr. Julfa Khatun Dr. Anisha Dutta**	**5**
Determination of normal visual field and physiological blind spot using Priestley Smith perimeter.	**Physiology**	**Dr. Saswati Ray Dr. Tanusree Nath Prof. Dr. Debarati Chanda Dr. Anisha Dutta**	**5**

Elective 1: Interpretation of normal ECG and diagnosis of common rhythm abnormalities

Name of Block	**BLOCK 1**
Name of Elective	Interpretation of normal ECG and diagnosis of common rhythm abnormalities
Location of hospital lab or research facility	**ECG Lab, Physiology department, JIMSH**
Name of internal preceptor(s)	**Prof. Dr. Arnab Sengupta** **Dr. Julfa Khatun** **Dr. Aparajita Ray** **DR. Tanusree Nath**
Name of external preceptor (if any)	**Nil**
Learning objectives of the elective	**1. To understand the physiological basis of ECG** **2. To identify the ECG instrument and its parts correctly.** **3. To enumerate the indications for ECG.** **4. To interpret details of each wave, Heart rate** **5. To determine electrical axis of heart.** **6. To identify common rhythm abnormalities by different waveforms**
Number of students that can be accommodated in this elective	**5**
Prerequisites for the elective	**1. Basic knowledge of cardiac potentials** **2. Basic knowledge of conducting system of heart**
Learning resources for students	**Practical and theory books on physiology**
List of activities in which the student will participate	**1. Recruit subjects** **2. Perform the specified tests under supervisor & independently** **3. Data collection** **4. Tabulating data in worksheet.** **5. Interpret and assess the results** **6. Drawing summary of everyday work**
Portfolio entries required	**Yes** **1. Photographs** **2. Master charts**
Log book entry required	**Yes ,** **1. Record of daily activities** **2. Reflection**
Assessment	**OSPE , Demonstration , VIVA-VOCE**
Other comments	**Publication , Poster presentation**

Elective 2: Measurement and interpretation of dynamic lung volumes using computerised spirometry

Name of Block	**BLOCK 1**
Name of Elective	**Measurement and interpretation of dynamic lung volumes using computerised spirometry**
Location of hospital lab or research facility	**Human & Experiment Lab, Physiology department, JIMSH**
Name of internal preceptor(s)	**Dr. Aparajita Ray Dr. Saswati Ray Dr. Julfa Khatun Dr. Anisha Dutta**
Name of external preceptor (if any)	**Nil**
Learning objectives of the elective	**1. To understand the physiological basis of spirometry 2. To interpret different lung volumes and capacities**
Number of students that can be accommodated in this elective	**5**
Prerequisites for the elective	**Knowledge of static and dynamic ling volumes and capacities.**
Learning resources for students	**Practical and theory books on physiology**
List of activities in which the student will participate	**1. Recruit subjects 2. Perform the specified tests under supervisor & independently 3. Data collection 4. Tabulating data in worksheet. 5. Interpret and assess the results 6. Drawing summary of everyday work**
Portfolio entries required	**Yes , 1. Photographs 2. Master charts**
Log book entry required	**Yes , 1. Record of daily activities 2. Reflection**
Assessment	**OSPE , Demonstration , VIVA-VOCE**
Other comments	**Publication , Poster presentation**

Elective 3: **Determination of Arneth Count,**
Measurement of RDW and their application in diagnosis of common haematological disorder

Name of Block	**BLOCK 1**
Name of Elective	**Determination of Arneth Count, Measurement of RDW and their application in diagnosis of common haematological disorder**
Location of hospital lab or research facility	**DEPARTMENT OF PHYSIOLOGY, RESEARCH LAB, JIMSH BUDGE BUDGE**
Name of internal preceptor(s)	**3. Prof. Dr. Arnab Sengupta** **4. Dr. Julfa Khatun** **5. Dr. Anisha Dutta**
Name of external preceptor (if any)	**No**
Learning objectives of the elective	**1. To learn about mature and immature neutrophils** **2. To learn the method of estimating Arneth count** **3. To learn about the importance of Arneth count** **4. To learn the method of estimating RDW** **5. To learn about the importance of RDW**
Number of students that can be accommodated in this elective	**5**
Prerequisites for the elective	**Basic knowledge about hematology**
Learning resources for students	**Guidelines and departmental handbook provided**
List of activities in which the student will participate	**7. Recruit subjects** **8. Perform the specified test under supervisor & independently** **9. Data collection** **10. Tabulating data in worksheet.** **11. Interpret and assess the results** **12. Drawing summary of everyday work**
Portfolio entries required	**Yes ,** **3. Photographs** **4. Master charts**
Log book entry required	**Yes,** **1. Record of daily activities** **2. Reflection**
Assessment	**Daily attendance** **DOAP, viva – voce, OSPE**
Other Comments	**Publications and poster presentation**

Elective 4: Determination of normal visual field and physiological blind spot using Priestley Smith perimeter.

Name of Block	**BLOCK - 1**
Name of Elective	**Determination of normal visual field and physiological blind spot using Priestley Smith perimeter.**
Location of hospital lab or research facility	**Human & Experiment Lab, Physiology department, JIMSH**
Name of internal preceptor(s)	**Dr. Saswati Ray Dr. Tanusree Nath Prof. Dr. Debarati Chanda Dr. Anisha Dutta**
Name of external preceptor (if any)	**Nil**
Learning objectives of the elective	**3. To understand the structural and functional anatomy of retina 4. To trace the different components of the visual pathway 5. To map the visual field by Priestley Smith perimeter 6. To corroborate the finding with confrontation perimetry**
Number of students that can be accommodated in this elective	**5**
Prerequisites for the elective	**Physiology of vision & ocular movements**
Learning resources for students	**Practical and theory books on physiology**
List of activities in which the student will participate	**13. Recruit subjects 14. Perform the specified tests under supervisor & independently 15. Data collection 16. Tabulating data in worksheet. 17. Interpret and assess the results 18. Drawing summary of everyday work**
Portfolio entries required	**Yes , 5. Photographs 6. Master charts**
Log book entry required	**Yes , 3. Record of daily activities 4. Reflection**
Assessment	**OSPE , Demonstration , VIVA-VOCE**
Other Comments	**Publication , Poster presentation**

ELECTIVE BLOCK 1			
Name of Elective	**Department**	**Name of Preceptor**	**No. of students**
Lower respiratory tract infections in patients at JIMSH – Microbiological profile and drug susceptibility patterns	**Microbiology**	**Dr. Arpita Sarkar and Mr. Aditya Tiwari**	**6**
Bacteriological Profile and antibiogram of Urinary Tract Infection in a tertiary care hospital in Eastern India	**Microbiology**	**Dr. Arpita Sarkar and Ms. Moutusi Dey**	**6**
Audit of standard precautions at Central Laboratory, JIMSH	**Microbiology**	**Dr. Nibedita Debnath and Dr. Avranil Goswami**	**6**
Active surveillance of hospital acquired infections (HAIs) at JIMSH and the involved pathogens.	**Microbiology**	**Dr. Syamal Modi and Dr. Avranil Goswami**	**6**
Surveillance of MDROs amongst patients attending a tertiary care centre in Eastern India	**Microbiology**	**Dr. Nibedita Debnath and Dr. Monalisa Debbarma**	**6**
Adherence to Hospital Antibiotic Policy at a tertiary care centre in Eastern India	**Microbiology**	**Dr. Syamal Modi and Dr. Pritha Pramanick**	**6**

Elective 1: Lower respiratory tract infections in patients at JIMSH – Microbiological profile and drug susceptibility patterns

Name of Block	**Block 1**
Name of Elective	**Lower respiratory tract infections in patients at JIMSH – Microbiological profile and drug susceptibility patterns**
Location of hospital lab or research facility	**Central Laboratory, Department of Microbiology, JIMSH**
Name of internal preceptor(s)	**Dr. Arpita Sarkar and Mr. Aditya Tiwari**
Name of external preceptor (if any)	**N/A**
Learning objectives of elective	1. **Identify the patients of suspected LRTI** 2. **Understand the methods used in the diagnosis of LRTI** 3. **Know about the prevalent bacterial causes of LRTI & their sensitivity patterns**
Number of students that can be accommodated in this elective	**6**
Prerequisites for elective	**Access to patient wards** **Access to laboratory resources** **Access to departmental library**
Learning Resources for students	1. **Panicker's Textbook of Microbiology** 2. **Topley And Wilson's Microbiology** 3. **Mackie & McCartney Practical Medical Microbiology** 4. **Departmental records/MRD data**
List of activities in which the student will participate	1. **Take patient history & collect and document examination findings** 2. **Participate in sample handling as well as testing methods** 3. **Compilation & Analysis of data** 4. **Write an Abstract of the work done**
Portfolio entries required	**Documentation of the data collected** **Documentation of presentation done**
Log book entry required	**Satisfactory completion of posting with a "Meets Expectation (M)" grade**
Assessment	**Daily Attendance** **Day-to-day participation in departmental activity** **Performance of assigned tasks** **Presentation of the compiled and analyzed data**
Other comments	**Nil**

Elective 2: Bacteriological Profile and antibiogram of Urinary Tract Infection in a tertiary care hospital in Eastern India

Name of Block	**Block 1**
Name of Elective	**Bacteriological Profile and antibiogram of Urinary Tract Infection in a tertiary care hospital in Eastern India**
Location of hospital lab or research facility	**Central Laboratory, Department of Microbiology, JIMSH**
Name of internal preceptor(s)	**Dr. Arpita Sarkar and Ms. Moutusi Dey**
Name of external preceptor (if any)	**N/A**
Learning objectives of elective	1. **Identify the patients of suspected UTI** 2. **Understand the methods used in the diagnosis of UTI** 3. **Know about the prevalent bacterial causes of UTI & their sensitivity patterns**
Number of students that can be accommodated in this elective	**6**
Prerequisites for elective	**Access to patient wards** **Access to laboratory resources** **Access to departmental library**
Learning Resources for students	1. **Panicker's Textbook of Microbiology** 2. **Topley And Wilson's Microbiology** 3. **Mackie & McCartney Practical Medical Microbiology** 4. **Departmental records/MRD data**
List of activities in which the student will participate	1. **Take patient history & collect and document examination findings** 2. **Participate in sample handling as well as testing methods** 3. **Compilation & Analysis of data** 4. **Write an Abstract of the work done**
Portfolio entries required	**Documentation of the data collected** **Documentation of presentation done**
Log book entry required	**Satisfactory completion of posting with a "Meets Expectation (M)" grade**
Assessment	**Daily Attendance** **Day-to-day participation in departmental activity** **Performance of assigned tasks** **Presentation of the compiled and analyzed data**
Other comments	**Nil**

Elective 3: Audit of standard precautions at Central Laboratory, JIMSH

Name of Block	**Block 1**
Name of Elective	**Audit of standard precautions at Central Laboratory, JIMSH**
Location of hospital lab or research facility	**Central Laboratory, Department of Microbiology, JIMSH**
Name of internal preceptor(s)	**Dr. Nibedita Debnath and Dr. Avranil Goswami**
Name of external preceptor (if any)	**N/A**
Learning objectives of elective	**1. Understand the principles and significance of Standard Precautions in a lab** **2. Observe and learn to practice standard precautions as a medical personnel** **3. Observe and document compliance to standard precautions by the laboratory staff**
Number of students that can be accommodated in this elective	**6**
Prerequisites for elective	**Access to Laboratory Resources**
Learning Resources for students	1. **Essentials of Hospital Infection Control by Sastry** 2. **Infection prevention & control by Elliott** 3. **National Guidelines for Infection Prevention and Control in Healthcare Facilities, NCDC**
List of activities in which the student will participate	1. **Make a checklist of Standard Precautions** **2. Observe and document compliance to standard precautions by the laboratory staff** **3. Suggest CAPA, if any.** **4. Compilation & Analysis of data** **5. Write an Abstract of the work done**
Portfolio entries required	**Documentation of the data collected** **Documentation of presentation done**
Log book entry required	**Satisfactory completion of posting with a "Meets Expectation (M)" grade**
Assessment	**Daily Attendance** **Day-to-day participation in departmental activity** **Performance of assigned tasks** **Presentation of the compiled and analyzed data**
Other comments	**Nil**

Elective 4: Active surveillance of hospital acquired infections (HAIs) at JIMSH and the involved pathogens.

Name of Block	**Block 1**
Name of Elective	**Active surveillance of hospital acquired infections (HAIs) at JIMSH and the involved pathogens.**
Location of hospital lab or research facility	**Central Laboratory, Department of Microbiology, JIMSH**
Name of internal preceptor(s)	**Dr. Syamal Modi and Dr. Avranil Goswami**
Name of external preceptor (if any)	**N/A**
Learning objectives of elective	**1. Understand HAIs and the methods of their detection/diagnosis** **2. Learn to identify and document HAIs** **3. Know about the major HAIs and their causes** **4. Learn the methods of prevention of HAIs**
Number of students that can be accommodated in this elective	**6**
Prerequisites for elective	**Access to patient wards/ICUs etc.** **Access to Laboratory Resources** **Access to HICC data, if required**
Learning Resources for students	1. **Essentials of Hospital Infection Control by Sastry** 2. **Infection prevention & control by Elliott** 3. **National Guidelines for Infection Prevention and Control in Healthcare Facilities, NCDC**
List of activities in which the student will participate	1. **Prepare a checklist for diagnosing HAIs** 2. **Take patient history & collect and document examination findings** 3. **Participate in sample handling & testing methods** 4. **Suggest CAPA, if any.** 5. **Compilation & Analysis of data** 6. **Write an Abstract of the work done**
Portfolio entries required	**Documentation of the data collected** **Documentation of presentation done**
Log book entry required	**Satisfactory completion of posting with a "Meets Expectation (M)" grade**
Assessment	**Daily Attendance** **Day-to-day participation in departmental activity** **Performance of assigned tasks** **Presentation of the compiled and analyzed data**
Other comments	**Nil**

Elective 5: Surveillance of MDROs amongst patients attending a tertiary care centre in Eastern India

Name of Block	**Block 1**
Name of Elective	**Surveillance of MDROs amongst patients attending a tertiary care centre in Eastern India**
Location of hospital lab or research facility	**Central Laboratory, Department of Microbiology, JIMSH**
Name of internal preceptor(s)	**Dr. Nibedita Debnath and Dr. Monalisa Debbarma**
Name of external preceptor (if any)	**N/A**
Learning objectives of elective	**1. Understand MDRO and the criteria for its identification** **2. Learn about the prevailing drug resistance pattern amongst the common isolates** **3. Know about the steps for controlling the emergence of multi-drug resistant strains** **4. Understand its impact on the healthcare resources**
Number of students that can be accommodated in this elective	**6**
Prerequisites for elective	**Access to Laboratory Resources**
Learning Resources for students	1. **Topley And Wilson's Microbiology** 2. **Management of multiple drug-resistant infections by Gillespie** **3. Antimicrobial resistance: Opportunities and challenges by Prabhakar** **4. Panicker's Textbook of Microbiology**
List of activities in which the student will participate	1. **Participate in routine culture and AST along with MDRO screening** 2. **Compilation & Analysis of data** 3. **Write an Abstract of the work done**
Portfolio entries required	**Documentation of the data collected** **Documentation of presentation done**
Log book entry required	**Satisfactory completion of posting with a "Meets Expectation (M)" grade**
Assessment	**Daily Attendance** **Day-to-day participation in departmental activity** **Performance of assigned tasks** **Presentation of the compiled and analyzed data**
Other comments	**Nil**

Elective 6: Adherence to Hospital Antibiotic Policy at a tertiary care centre in Eastern India

Name of Block	**Block 1**
Name of Elective	**Adherence to Hospital Antibiotic Policy at a tertiary care centre in Eastern India**
Location of hospital lab or research facility	**Central Laboratory, Department of Microbiology, JIMSH**
Name of internal preceptor(s)	**Dr. Syamal Modi and Dr. Pritha Pramanick**
Name of external preceptor (if any)	**N/A**
Learning objectives of elective	**1. Learn about Antimicrobial Stewardship and the Hospital Antibiotic Policy.** **2. Understand the methods of formulation of antibiotic policy** **3. Observe and document adherence to antibiotic policy by the doctors**
Number of students that can be accommodated in this elective	**6**
Prerequisites for elective	**Access to patient wards/ICUs** **Access to Laboratory Resources**
Learning Resources for students	1. **Essentials of Antimicrobial Stewardship by Sastry** 2. **Antibiotic Policy document of JIMSH** 3. **Antibiotic guidelines, by the Health & FW Dept, Gov. of WB (Version 1.0)**
List of activities in which the student will participate	1. **Observe and document adherence to antibiotic policy by the doctors** 2. **Note deviations and CAPA, if any.** 3. **Compilation & Analysis of data** 4. **Write an Abstract of the work done**
Portfolio entries required	**Documentation of the data collected** **Documentation of presentation done**
Log book entry required	**Satisfactory completion of posting with a "Meets Expectation (M)" grade**
Assessment	**Daily Attendance** **Day-to-day participation in departmental activity** **Performance of assigned tasks** **Presentation of the compiled and analyzed data**
Other comments	**Nil**

ELECTIVE BLOCK 1			
Name of Elective	**Department**	**Name of Preceptor**	**No. of students**
Biopsy specimen handling in Pathology Lab	**Pathology**	**Dr.Prof.Dipanwita Nag Dr. Shreya Kar**	**8**
Collection & handling of blood sample	**Pathology**	**Dr Prof Col Prasanta SenGupta Dr. Ayesha Abid**	**8**
Histopathological technique	**Pathology**	**Dr Prof Mahasweta Mallik Dr. Sanchita Biswas**	**8**
Exposure to cytological Lab – FNAC & Exfoliative cytology	**Pathology**	**Dr Prof Col Prasanta Sengupta Dr. Soumick Sarkar**	**8**
CPC (Clinico-pathological correlation) – its importance for better approach to patients	**Pathology**	**Dr Prof Dipanwita Nag Dr. Smita Priyam**	**8**

Elective 1: Biopsy specimen handling in Pathology Lab

Name of Block	**Block 1**
Name of Elective	**Different types of histopathology and cytopathology staining- H/E stain, PAS, PAP, Leishman, Giemsa their importance and interpretation.**
Location of hospital Lab or research facility	**Central Lab, JIMSH**
Name of internal preceptor(s)	**Dr.Prof.Dipanwita Nag** **Dr. Shreya Kar**
Name of external preceptor (if any)	**Nil**
Learning objectives of elective	**1. Participate in teaching session to get the basic understanding of use of different types of histopathology & cytopathology staining and their techniques.** **2. Present and perform all the above mentioned stains in given cases individually.**
Number of students that can be accommodated in this elective	**8**
Prerequisites for elective	**Immunization against Hepatitis B virus.**
Learning Resources for students	**Bancroft's theory and practice of histological techniques (8th Edition)**
List of activities in which the student will participate	**1. To describe the importance of histopathology and cytopathology stains for proper diagnosis of cases.** **2. To judge the requirement for special stains for particular cases as they apply to definitive diagnosis.** **3. To learn the staining procedure.**
Portfolio entries required	**Assignment provided.** **Documentation of self-directed learning as summary and reflection**
Log book entry required	**Completion of posting to be signed by Preceptor with a "meet expectation" (M) grade.**
Assessment	**Formative – daily attendance.** **Day-to-day participation in departmental activities.** **Performance of assigned tasks and presentation of worked up case in the department.**
Other comments	

Elective 2: Collection & handling of blood sample

Name of Block	**Block 1**
Name of Elective	**Interpretation of CBC report to determine different types of anemia**
Location of hospital Lab or research facility	**Central Lab, JIMSH**
Name of internal preceptor(s)	**Dr Prof Col Prasanta SenGupta** **Dr. Ayesha Abid**
Name of external preceptor (if any)	**Nil**
Learning objectives of elective	• **1. Know the sample required for the testing of anemia** • **2. Know the procedure of blood smear preparation and staining** • **Know the normal values of hemoglobin and red cell indices to help in assessment of patient samples.**
Number of students that can be accommodated in this elective	**8**
Prerequisites for elective	**Apron, gloves, immunisation against Hep B.**
Learning Resources for students	**Guidance from trained technicians/ seniors/ Preceptor.** **Practical text book.**
List of activities in which the student will participate	• **Work daily in the Hematology lab** • **Observe the requisition forms coming from ward/ OPD** • **Observe the processing of blood samples in Hematology analyzer** • **Prepare the blood smears of patient sample and stain** • **Read the values of patient's hemoglobin and red cell indices (as given by analyzer machine) to classify anemia morphologically** • **See the stained blood smears to determine morphology of RBC**
Portfolio entries required	• **Documentation of cases analysed by the student.** • **Documentation of self-directed learning as summary and reflection.**
Log book entry required	**Completion of posting to be signed by** **Preceptor with a "meet expectation" (M) grade.**
Assessment	**Formative – daily attendance.** **Day-to-day participation in the laboratory** **Presentation of cases observed and analysed Documentation of attendance and required portfolio and log book entries**
Other comments	

Elective 3: Histopathological technique

Name of Block	**Block 1**
Name of Elective	**Histopathological technique & importance of different steps.**
Location of hospital Lab or research facility	**Central Lab, JIMSH**
Name of internal preceptor(s)	**Dr Prof Mahasweta Mallik** **Dr. Sanchita Biswas**
Name of external preceptor (if any)	**Nil**
Learning objectives of elective	**Students should of know followings after completion of the session:** • **Should know the importance of maintaining correct documents of the sample received and how to efficiently work as a part of a team.** • **Should acquire obvious comprehensive knowledge regarding different steps in tissue processing and significance of various steps.**
Number of students that can be accommodated in this elective	**8**
Prerequisites for elective	**Vaccination against Hepatitis B virus.**
Learning Resources for students	**Guidance from seniors/ Preceptor.** **Practical text book.**
List of activities in which the student will participate	**1. Work daily in the tissue reception area.** **2. To observe, assist & perform the tissue processing done in lab.** **3. To observe & perform block preparation, section cutting.** **4. To ask seniors/ preceptor about further correction.**
Portfolio entries required	**Documentation of cases which were handled by the student.** **Documentation of presentation done.**
Log book entry required	**Completion of posting to be signed by Preceptor with a "meet expectation" (M) grade.**
Assessment	**Formative – daily attendance.** **Day-to-day participation in departmental activities.** **Performance of assigned tasks and presentation of worked up case in the department.**
Other comments	

Elective 4: Exposure to cytological Lab –FNAC & Exfoliative cytology

Name of Block	**Block 1**
Name of Elective	**Exposure to cytological Lab –FNAC & Exfoliative cytology**
Location of hospital Lab or research facility	**Central Lab, JIMSH**
Name of internal preceptor(s)	**Dr Prof Col Prasanta Sengupta** **Dr. Soumick Sarkar**
Name of external preceptor (if any)	**Nil**
Learning objectives of elective	• **To know the different types of sample required for cytological study.** • **To know different tests that are performed in cytology sample.** • **To know the significance of various tests that are done in cytology sample. .** • **Participate in tests performed in the lab.**
Number of students that can be accommodated in this elective	**8**
Prerequisites for elective	**Vaccination against Hepatitis B virus.**
Learning Resources for students	**Guidance from seniors/ Preceptor. Practical text book.**
List of activities in which the student will participate	• **Work daily in the sample reception area.** • **To observe, assist & perform the tests in the supplied sample.** • **To ask Seniors/ Preceptor about further information wherever required.**
Portfolio entries required	**Documentation of cases which were handled by him/ her.** **Documentation of presentation done.**
Log book entry required	**Completion of posting to be signed by Preceptor with a "meet expectation" (M) grade.**
Assessment	**Formative – daily attendance.** **Day-to-day participation in departmental activities.** **Performance of assigned tasks and presentation of worked up case in the department.**
Other comments	

Elective 5: CPC (Clinico-pathological correlation) – its importance for better approach to patients

Name of Block	**Block 1**
Name of Elective	**CPC (Clinico-pathological correlation) – its importance for better approach to patients**
Location of hospital Lab or research facility	**Central Lab, JIMSH**
Name of internal preceptor(s)	**Dr Prof Dipanwita Nag** **Dr. Smita Priyam**
Name of external preceptor (if any)	**Nil**
Learning objectives of elective	• **To know basis/ significance of CPC** • **To know details of tests and patients' Clinical findings** • **Participate in CPC in the lab along with patient's history**
Number of students that can be accommodated in this elective	**8**
Prerequisites for elective	**Must have received necessary immunisations.**
Learning Resources for students	**Essentials of Clinical Pathology- Kawthalkar** **Henry's Clinical Diagnosis and Management by Laboratory Methods.**
List of activities in which the student will participate	• **Work daily in the lab & note different tests** • **2. To observe & participate in CPC held during his/her tenure.**
Portfolio entries required	• **Documentation of cases where participated in CPC.** • **Documentation of presentation done.**
Log book entry required	**Completion of posting to be signed by Preceptor with a "meet expectation" (M) grade.**
Assessment	**Formative – daily attendance.** **Day-to-day participation in departmental activities.** **Performance of assigned tasks and presentation of worked up case in the department.**
Other comments	

ELECTIVE BLOCK 1			
Name of Elective	**Department**	**Name of Preceptor**	**No. of students**
Pharmacovigilance **Identifying, Recording And Reporting ADRs In A TertiaryCare Setup And Uploading The Collected Data To IPC Database By Vigiflow Software.**	**Pharmacology**	**Dr. Paramita Pal, Dr. Sughandha Garg, Dr. Rajasee Adhikary, Dr. Pradipta Das.**	**6**
Pharmacovigilance (Project) **Development of a Digital Adverse Drug Reaction (ADR) Reporting Resource**	**Pharmacology**	**Dr.Sughandha Garg, Dr. Pradipta Das, Dr. Rajasee Adhikary, Dr. Jaideep Bhaduri, Dr. Paramita Pal.**	**6**
Project **(Medication Safety/Clinical Pharmacology)** **Drug–Food Interactions in Hospital-Based Diets: Identification and Clinical Relevance**	**Pharmacology**	**Dr. Pradipta Das, Dr. Sughandha Garg, Dr.Payodhi Dhar, Dr. Paramita Pal.**	**6**
Project **(Medication Storage/ Medication Safety)** **Evaluation of Medication Storage Practices Among Hospitalized Patients**	**Pharmacology**	**Dr. Pradipta Das, Dr. Jaideep Bhaduri, Dr.Payodhi Dhar, Dr. Sughandha Garg, Dr. Paramita Pal**	**6**

Elective 1: Pharmacovigilance (project)

Identifying, Recording and reporting ADRs in a tertiary caresetup and uploading the collected data to IPC database by Vigiflow software.

Name of Block	**Block 1**
Name of Elective	**Pharmacovigilance** **Identifying, Recording and reporting ADRs in a tertiary care setup and uploading the collected data to IPC database by Vigiflow software.**
Location of hospital Lab or research facility	• **Department of Pharmacology (AMC), JIMSH** • **Medical College Hospital, JIMSH, Budge Budge**
Name of internal preceptor(s)	**Dr. Paramita Pal, Dr. Sughandha Garg, Dr. Rajasee Adhikary, Dr. Pradipta Das.**
Name of external preceptor (if any)	**N.A**
Learning objectives of elective	1. **To identify Adverse Drug reactions** 2. **To collect the data from patients and patient's clinical notes and laboratory reports.** 3. **To report the ADRs to AMC by ADR reporting form provided by IPC.** 4. **Uploading the data in Vigiflow software.**
Number of students that can be accommodated in this elective	**6**
Prerequisites for elective	**Reading about ADR materials and management from provided material**
Learning Resources for students	**CDSCO website** **Pharmacovigilance programme of India (PvPI)**
List of activities in which the student will participate	• **Identify ADRs with AMC team in hospital** • **Fill ADR forms** • **Enter data into vigiflow software** • **Apply causality scales** • **Write case report on ADR**
Portfolio entries required	**At the end of the module description of ADR reports added, the process to identify and report ADRs, reflections on the learning**
Log book entry required	• **Number of ADR reported** • **Number of ADR entered into vigiflow independently** • **Documentation of case report generated**
Assessment	1. **Attendance** 2. **Successful verification of required portfolio entries** 3. **Successful completion of posting as certified in log book with a "meet expectation" M grade.** 4. **Power point presentation of the entire project.**
Other comments	**N.A**

Elective 2: Project (preceptor initiated)

Development of a Digital Adverse Drug Reaction (ADR) Reporting Resource

Name of Block	**Block 1**
Name of Elective	**Project (Pharmacovigilance)** **Development of Digital Adverse Drug Reaction (ADR) Reporting resources**
Location of hospital Lab or research facility	**Department of Pharmacology (AMC) JIMSH** **Medical College Hospital, JIMSH, Budge Budge**
Name of internal preceptor(s)	**Dr. Sughandha Garg, Dr. Pradipta Das, Dr. Rajasee Adhikary, Dr. Jaideep Bhaduri, Dr. Paramita Pal.**
Name of external preceptor (if any)	**N.A**
Learning objectives of elective	**1. Describe the principles of pharmacovigilance and the importance of ADR reporting.** **2. Recognize different types of ADRs and classify those using standard schemes.** **3. Apply causality, severity and preventability scales to real or hypothetical cases.** **4. Outline the ADR reporting pathway used in the hospital and in PvPI.** **5. Convert pharmacovigilance concepts into a simple digital learning tool.** **6. Design flowcharts, examples and explanatory notes for a user-friendly digital guide.** **7. Promote ADR reporting by creating an accessible and accurate soft-copy resource for peers.**
Number of students that can be accommodated in this elective	**6**
Prerequisites for elective	**Reading about ADR materials and management from provided material**
Learning Resources for students	• **PvPI ADR reporting guidelines** • **CDSCO/IPC resources on pharmacovigilance** • **WHO guidelines on ADR causality and severity** • **Vigiflow (overview only)** • **Sample ADR forms used in the hospital** • **Reference materials on designing digital learning tools**

List of activities in which the student will participate	• **Orientation to pharmacovigilance principles** • **Review of existing ADR forms and reporting pathways** • **Identification of essential content for the digital resource** • **Designing flow-charts, examples, and stepwise reporting instructions** • **Preparing the digital module (PDF, PPT, or link)** • **Presentation of the digital resource to faculty**
Portfolio entries required	• **Draft outline of the digital resource** • **Sample filled ADR form prepared by the student** • **ADR case example with causality assessment** • **Reflection note on barriers to ADR reporting**
Log book entry required	• **Day-wise progress notes** • **Faculty review checkpoints** • **Completion of draft and final submission** **Final presentation record**
Assessment	1. **Attendance** 2. **Successful verification of required portfolio entries** 3. **Successful completion of posting as certified in log book with a "meet expectation" M grade.** 4. **Power point presentation of the research project.**
Other comments	**N.A**

Elective 3: Project (preceptor initiated)

Drug–Food Interactions in Hospital-Based Diets: Identification and Clinical Relevance

Name of Block	**Block 1**
Name of Elective	**Research** **(Medication Safety/ Clinical Pharmacology)** **Drug–Food Interactions in Hospital-Based Diets: Identification and Clinical Relevance**
Location of hospital Lab or research facility	**Department of Pharmacology JIMSH** **Medical College Hospital, JIMSH, Budge Budge**
Name of internal preceptor(s)	**Dr. Pradipta Das, Dr. Sughandha Garg, Dr.Payodhi Dhar, Dr. Paramita Pal.**
Name of external preceptor (if any)	**N.A**
Learning objectives of elective	**1. Describe the pharmacokinetic and pharmacodynamic basis of important drug–food interactions.** **2. Identify drugs whose absorption, metabolism or excretion is altered by specific food components.** **3. Analyze hospital diet charts and correlate them with commonly prescribed medications.** **4. Classify interactions based on clinical relevance and potential patient risk.** **5. Recommend appropriate timing of drug administration in relation to meals.** **6. Communicate drug–food interaction risks effectively to patients, interns and nursing staff.** **7. Prepare a structured interaction chart for practical hospital use.**
Number of students that can be accommodated in this elective	**6**
Prerequisites for elective	• **Knowledge about principles of pharmacokinetics, factors affecting drug metabolism and excretion** • **Familiar with standard hospital diets. Prior exposure through clinical postings is adequate.** • **Ability to perform basic literature search using textbooks or online databases.** • **Basic communication skills for interacting with ward staff, dietician and patients.**

Learning Resources for students	• **Goodman & Gilman – sections on absorption and food effects** • **Katzung – chapters on pharmacokinetics** • **NMC Pharmacology Competency Modules** • **WHO resources on rational drug use** • **Hospital diet charts and nutrition protocols** • **Review articles on clinically significant drug–food interactions** • **Online databases (Micromedex, Medscape interaction checker, if accessible)**
List of activities in which the student will participate	1. **Review of hospital diet patterns** 2. **Listing commonly prescribed ward medications** 3. **Identification of potential drug–food interactions** 4. **Discussion of clinical significance with faculty mentor** 5. **Preparation of drug–food interaction table** 6. **Short counseling sessions for select patients (optional)** 7. **Preparation of a soft-copy summary for academic submission**
Portfolio entries required	• **Notes from interaction identification** • **One patient-based example with explanation** • **Summary table prepared by the student** • **Reflection note on how food affects therapeutic outcomes**
Log book entry required	• **Date-wise activity record** • **Faculty signature after each activity** • **Attendance for orientation and final presentation**
Assessment	1. **Attendance** 2. **Successful entries of required portfolio entries** 3. **Successful completion of posting as certified in log book with a "meet expectation" M grade.** 4. **Power point presentation of the entire research project.**
Other comments	**NA**

Elective 4: Research (preceptor initiated)

Evaluation of Medication Storage Practices among Hospitalized Patients

Name of Block	**Block 1**
Name of Elective	**Project** **(Medication Safety)** **Evaluation of Medication Storage Practices Among Hospitalized Patients**
Location of hospital Lab or research facility	**Department of Pharmacology JIMSH** **Department of Medicine, JIMSH** **Medical record Department - Medical College Hospital, JIMSH, Budge Budge**
Name of internal preceptor(s)	**Dr. Pradipta Das, Dr. Jaideep Bhaduri, Dr.Payodhi Dhar, Dr. Sughandha Garg, Dr. Paramita Pal**
Name of external preceptor (if any)	**NA**
Learning objectives of elective	1. **Explain how temperature, humidity, light and handling affect drug stability.** 2. **Evaluate patient-level medication storage practices using a structured checklist.** 3. **Identify storage errors that may lead to reduced drug efficacy or increased toxicity.** 4. **Recognize medicines that require special storage conditions.** 5. **Provide clear counseling to patients and caregivers regarding correct storage.** 6. **Document and categorize common storage mistakes seen in wards.** 7. **Suggest feasible system-level improvements for safe medication storage.**
Number of students that can be accommodated in this elective	**6**
Prerequisites for elective	• **Knowledge on Drug stability, Storage requirements.** • **Handling of common dosage forms** • **Basic understanding of commonly prescribed medicines in ward settings, especially those requiring special storage**

	• **Ability to communicate with patients and caregivers during ward visits.** • **Familiarity with ward protocols, infection control practices and maintaining patient confidentiality.** • **Capability to use or interpret simple checklists and record observational data.**
Learning Resources for students	• **Pharmacology textbooks – stability and storage chapters** • **WHO/CDC guidelines on medication safety** • **Hospital policies on drug storage (ICU/wards/pharmacy)** • **Articles on degradation of temperature- or light-sensitive drugs** • **Standard drug information sources regarding storage conditions**
List of activities in which the student will participate	• **Creation or use of a structured checklist** • **Ward visits for patient-level assessment** • **Identification and documentation of storage errors** • **Counseling of patients/caregivers** • **Faculty discussion of findings** • **Preparation of a report and patient education leaflet**
Portfolio entries required	• **Two completed checklists as samples** • **One detailed case of improper storage with analysis** • **A draft patient education leaflet** • **A reflective note on how improper storage affects outcomes**
Log book entry required	• **Checklist completion dates** • **Ward visit logs (along with photographs)** • **Summary of daily observations** • **Faculty signatures**
Assessment	1. **Attendance** 2. **Successful entries of required portfolio entries** 3. **Successful completion of posting as certified in log book with a "meet expectation" M grade.** 4. **Power point presentation of the entire project**
Other comments	**NA**