



MALANKARA ORTHODOX SYRIAN CHURCH MEDICAL COLLEGE HOSPITAL

(AN INSTITUTE UNDER THE MALANKARA ORTHODOX SYRIAN CHURCH MEDICAL MISSION)

KOLENCHERY, ERNAKULAM DISTRICT, KERALA, INDIA. PIN-682311, Telephone: 0484-2885000, 3055555
3055666, Fax: 2760409, E-mail: mmhn@moscmm.org, www.moscmm.org

HRD/TO/2021


DATED: 20-09-2021,

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Ms. Mariya Joy**, B.Pharm student of Nirmala College of Pharmacy, Muvatupuzha has successfully completed her observer training as part of her course curriculum, in the Department of Pharmacy of this collegiate hospital during the period from 18-08-2021 to 18-09-2021.

MOSC Medical College Hospital is a 1100-bedded multi-speciality hospital with superspeciality departments of Cardiology, Gastroenterology, Neonatology, Orthopaedics, Nephrology, Paediatric Surgery, Neuro Surgery, Neurology, Plastic & Microvascular Surgery and Urology along with other departments of Dermatology, Dental Surgery, General Medicine, Gynaecology & Obstetrics, Imageology, Paediatrics, Clinical Psychology, Psychiatry, Ophthalmology, ENT, Anaesthesiology, and Physical Medicine

FOR M.O.S.C. Medical College Hospital,


Bejoy K. Thomas,
Head - Human Resources Management.



MALANKARA ORTHODOX SYRIAN CHURCH MEDICAL COLLEGE HOSPITAL

(AN INSTITUTE UNDER THE MALANKARA ORTHODOX SYRIAN CHURCH MEDICAL MISSION)

KOLENCHERY, ERNAKULAM DISTRICT, KERALA, INDIA. PIN-682311, Telephone: 0484-2885000, 3055555 3055666, Fax: 2760409, E-mail: mmmhn@moscmm.org, www.moscmm.org

HRD/TO/2021

DATED: 20-09-2021,

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Ms. Jomy John**, B.Pharm student of Nirmala College of Pharmacy, Muvatupuzha has successfully completed her observer training as part of her course curriculum, in the Department of Pharmacy of this collegiate hospital during the period from 18-08-2021 to 18-09-2021.

MOSC Medical College Hospital is a 1100-bedded multi-speciality hospital with superspeciality departments of Cardiology, Gastroenterology, Neonatology, Orthopaedics, Nephrology, Paediatric Surgery, Neuro Surgery, Neurology, Plastic & Microvascular Surgery and Urology along with other departments of Dermatology, Dental Surgery, General Medicine, Gynaecology & Obstetrics, Imageology, Paediatrics, Clinical Psychology, Psychiatry, Ophthalmology, ENT, Anaesthesiology, and Physical Medicine

FOR M.O.S.C. Medical College Hospital,


Bejoy K. Thomas,

Head - Human Resources Management.



MALANKARA ORTHODOX SYRIAN CHURCH MEDICAL COLLEGE HOSPITAL

(AN INSTITUTE UNDER THE MALANKARA ORTHODOX SYRIAN CHURCH MEDICAL MISSION)

KOLENCHERY, ERNAKULAM DISTRICT, KERALA, INDIA. PIN-682311, Telephone: 0484-2885000, 3055555
3055666, Fax: 2760409, E-mail: mmmhn@moscmm.org, www.moscmm.org

HRD/TO/2021

DATED: 20-09-2021,

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Ms. Elza Baby**, B.Pharm student of Nirmala College of Pharmacy, Muvatupuzha has successfully completed her observer training as part of her course curriculum, in the Department of Pharmacy of this collegiate hospital during the period from 18-08-2021 to 18-09-2021.

MOSC Medical College Hospital is a 1100-bedded multi-speciality hospital with superspeciality departments of Cardiology, Gastroenterology, Neonatology, Orthopaedics, Nephrology, Paediatric Surgery, Neuro Surgery, Neurology, Plastic & Microvascular Surgery and Urology along with other departments of Dermatology, Dental Surgery, General Medicine, Gynaecology & Obstetrics, Imageology, Paediatrics, Clinical Psychology, Psychiatry, Ophthalmology, ENT, Anaesthesiology, and Physical Medicine

FOR M.O.S.C. Medical College Hospital,

Bejoy K. Thomas,

✱ **Head -Human Resources Management.**



MALANKARA ORTHODOX SYRIAN CHURCH MEDICAL COLLEGE HOSPITAL

(AN INSTITUTE UNDER THE MALANKARA ORTHODOX SYRIAN CHURCH MEDICAL MISSION)

KOLENCHERY, ERNAKULAM DISTRICT, KERALA, INDIA. PIN-682311, Telephone: 0484-2885000, 3055555 3055666, Fax: 2760409, E-mail: mmhn@moscmm.org, www.moscmm.org

HRD/TO/2021

DATED: 20-09-2021,

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Ms. Aiswarya Suresh**, B.Pharm student of Nirmala College of Pharmacy, Muvatupuzha has successfully completed her observer training as part of her course curriculum, in the Department of Pharmacy of this collegiate hospital during the period from 18-08-2021 to 18-09-2021.

MOSC Medical College Hospital is a 1100-bedded multi-speciality hospital with superspeciality departments of Cardiology, Gastroenterology, Neonatology, Orthopaedics, Nephrology, Paediatric Surgery, Neuro Surgery, Neurology, Plastic & Microvascular Surgery and Urology along with other departments of Dermatology, Dental Surgery, General Medicine, Gynaecology & Obstetrics, Imageology, Paediatrics, Clinical Psychology, Psychiatry, Ophthalmology, ENT, Anaesthesiology, and Physical Medicine

FOR M.O.S.C. Medical College Hospital,

Bejoy K. Thomas,

Head - Human Resources Management.



MALANKARA ORTHODOX SYRIAN CHURCH MEDICAL COLLEGE HOSPITAL

(AN INSTITUTE UNDER THE MALANKARA ORTHODOX SYRIAN CHURCH MEDICAL MISSION)

KOLENCHERY, ERNAKULAM DISTRICT, KERALA, INDIA. PIN-682311, Telephone: 0484-2885000, 3055555
3055666, Fax: 2760409, E-mail: mmmhn@moscmm.org, www.moscmm.org

HRD/TO/2021

DATED: 20-09-2021,

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Ms. Ashly Peter**, B.Pharm student of Nirmala College of Pharmacy, Muvatupuzha has successfully completed her observer training as part of her course curriculum, in the Department of Pharmacy of this collegiate hospital during the period from 18-08-2021 to 18-09-2021.

MOSC Medical College Hospital is a 1100-bedded multi-speciality hospital with superspeciality departments of Cardiology, Gastroenterology, Neonatology, Orthopaedics, Nephrology, Paediatric Surgery, Neuro Surgery, Neurology, Plastic & Microvascular Surgery and Urology along with other departments of Dermatology, Dental Surgery, General Medicine, Gynaecology & Obstetrics, Imageology, Paediatrics, Clinical Psychology, Psychiatry, Ophthalmology, ENT, Anaesthesiology, and Physical Medicine

FOR M.O.S.C. Medical College Hospital,


Bejoy K. Thomas,
Head - Human Resources Management.



MALANKARA ORTHODOX SYRIAN CHURCH MEDICAL COLLEGE HOSPITAL

(AN INSTITUTION UNDER THE MALANKARA ORTHODOX SYRIAN CHURCH MEDICAL MISSION)

KOLENCHERY, ERNAKULAM DISTRICT, KERALA, INDIA PIN - 682 311, Telephone: 0484 - 2885000, 7155000
Fax 0484 - 2760409, PAN AAATM 3854A, GSTIN : 32AAATM3854A1Z4, E-mail: mmmhn@moscmm.org, www.moscmm.org

HRD/TO/2022


DATED: 15-07-2022,

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Ms. Aneena Jose, B.Pharm student of Nirmala College of Pharmacy, Muvatupuzha has successfully completed her internship as part of her course curriculum, in the Department of Pharmacy of this collegiate hospital during the period from 06-06-2022 to 08-07-2022.

MOSC Medical College Hospital is a 1100-bedded multi-speciality hospital with superspeciality departments of Cardiology, Gastroenterology, Neonatology, Orthopaedics, Nephrology, Paediatric Surgery, Neuro Surgery, Neurology, Plastic & Microvascular Surgery and Urology along with other departments of Dermatology, Dental Surgery, General Medicine, Gynaecology & Obstetrics, Imageology, Paediatrics, Clinical Psychology, Psychiatry, Ophthalmology, ENT, Anaesthesiology, and Physical Medicine

FOR M.O.S.C Medical College Hospital,


Bejoy K. Thomas,
Head - Human Resources Management.

———— INSTITUTIONS UNDER THE MALANKARA ORTHODOX SYRIAN CHURCH MEDICAL MISSION ————

- Malankara Orthodox Syrian Church Medical Mission Hospital
- Malankara Orthodox Syrian Church Medical College
- Malankara Orthodox Syrian Church Institute of Allied Health Sciences
- Malankara Orthodox Syrian Church College of Nursing
- Malankara Orthodox Syrian Church Centre for Allied Health Sciences



MALANKARA ORTHODOX SYRIAN CHURCH MEDICAL COLLEGE HOSPITAL

(AN INSTITUTE UNDER THE MALANKARA ORTHODOX SYRIAN CHURCH MEDICAL MISSION)

KOLENCHERY, ERNAKULAM DISTRICT, KERALA, INDIA. PIN-682311, Telephone: 0484-2885000, 3055555 3055666, Fax: 2760409, E-mail: mmmhn@moscmm.org, www.moscmm.org

HRD/TO/2021

DATED: 20-09-2021,

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Ms. Deepa Susan Varghese**, B.Pharm student of Nirmala College of Pharmacy, Muvatupuzha has successfully completed her observer training as part of her course curriculum, in the Department of Pharmacy of this collegiate hospital during the period from 18-08-2021 to 18-09-2021.

MOSC Medical College Hospital is a 1100-bedded multi-speciality hospital with superspeciality departments of Cardiology, Gastroenterology, Neonatology, Orthopaedics, Nephrology, Paediatric Surgery, Neuro Surgery, Neurology, Plastic & Microvascular Surgery and Urology along with other departments of Dermatology, Dental Surgery, General Medicine, Gynaecology & Obstetrics, Imageology, Paediatrics, Clinical Psychology, Psychiatry, Ophthalmology, ENT, Anaesthesiology, and Physical Medicine

FOR M.O.S.C. Medical College Hospital,


Bejoy K. Thomas,

Head - Human Resources Management.

NIRMALA COLLEGE OF PHARMACY
SYLLABUS AND SCHEDULE OF CLASSES FOR MBBS ELECTIVE-
MOSC, KOLENCHERY

PHARMACEUTICAL CONCEPTS: DRUG DESIGN TO POST MARKETING
SURVEILLANCE (30hrs)

Modules	Topics	Date & Time
I	1. Protein database 2. Lead and ligands 3. Docking and Screening 4. Interpretation of data and molecular dynamics.	03/04/2021 12.30-5.30 pm
II	1. Controlled drug delivery systems (CRDDS)- Concept, Terminology, Difference in various DDS like ER, CR, DR and its considerations in drug administration 2. Targeted Drug delivery systems (TDDS) - Concept of targeted drug delivery system, Nanoparticle, Liposomes 3. Drug development as tablet - Manufacturing variables and process, the relationship between variables, and quality of finished product 4. Quality testing as a tool for bioavailability assessment - Dissolution Study: Brief Introduction and concept 5. Stability Study - Concept of Expiry date and storage condition, Method to determine the expiry date. Quality of drug product after the expiry 6. Exposure to the practical aspects of - Comparative dissolution of marketed drug product - Analysis of drug release patterns from various CRDDS - Tablet preparation and assessment of manufacturing variables - Stability data analysis based on literature	04/04/2023 & 05/04/2023 12.30-4.30 pm
III	1. Laboratory Animals 2. Animal house management 3. Route of administration 4. Pharmacological screening of some selected models	17/04/2023 & 18/04/2023 12.30-4.30 pm

IV	1. Significance of QC 2. Single component analysis by UV spectroscopy. 3. HPLC analysis of pharmaceuticals and data interpretation. 4. IR spectroscopy - data interpretation	19/04/2023 12.30-4.30 pm
V	1. Hands-on training on Drug information software – Micromedex 2. Medication error 3. Drug interaction 4. Adverse drug reaction 5. FDA pharmacovigilance database	20/04/2023 12.30-5.30 pm

PHARMACEUTICAL CONCEPTS: DRUG DESIGN TO POST MARKETING SURVEILLANCE (30hrs)

Expected learning outcome:

Upon completion of the course, students will be able to

- Brief the Importance of suitable drug development to ensure the therapeutic efficacy
- Illustrate the concept behind various controlled and targeted drug delivery systems
- Handle laboratory animals and perform pharmacological screening of drugs
- Analyse the prescription to identify and resolve drug-related problems
- Evaluate the FDA pharmacovigilance database

Module-wise evaluation assessment mark - (10 marks)

Course Framework Module 1: Molecular docking (5 hrs)

Modules	Learning outcomes	Faculty details (Name, Designation, contact details)	Mode of teaching – Topic wise (Lecture, demonstration, training)	Mode of evaluation- (Description/ MCQ/ assignment)	Study materials including references (Hard copy/soft copy/ web link/ video link etc)
1. Protein database 2. Lead and ligands 3. Docking and Screening 4. Interpretation of data and molecular dynamics.	1. Use protein data and how to choose the best protein structure. 2. Draw and design ligands and save in formats required. 3. Perform docking using Autodock vina. 4. Analysis of docking results, selection of best ligand. Molecular dynamics simulation and interpretation of data using Desmond.	Dr. Prasanth Francis, Associate Professor, 9488573217	Hands on Training.	MCQ	Soft copy

Module 2: Pharmaceutical Product Development and Quality Assessment (8 hrs)

Modules	Learning outcomes	Faculty details (Name, Designation, contact details)	Mode of teaching – Topic wise (Lecture, demonstration, training)	Mode of evaluation- (Description/ MCQ/ assignment)	Study materials including references (Hard copy/soft copy/web link/ video link etc)
1. Controlled drug delivery systems (CRDDS)- Concept, Terminology, Difference in various DDS like ER, CR, DR and its considerations in drug administration	1 The student will be able to differentiate the various terminology and its applications	Dr. Dhanish Joseph, Associate professor 9846984399 dhanish@nirmalacp.org	Lecture, demonstration	MCQ	Soft copy, Video link
2. Targeted Drug delivery systems (TDDS) - Concept of targeted drug delivery system, Nanoparticle, Liposomes	2 The student will be able to describe the concept of NDDS	Dr Gifty M Jojo, Assistant Professor , 9496825595 gifty@nirmalacp.org	Lecture, demonstration	MCQ	Soft copy, Video link
3. Drug development as tablet - Manufacturing variables and process, the relationship between variables, and quality of finished product	3 The student will be able to describe the manufacturing variables and its significance in quality of product	Dr. Manju maria Mathews Professor 7907157206 drmanju@nirmalacp.org	Lecture, demonstration	MCQ	Soft copy, Video link
4. Quality testing as a tool for bioavailability assessment - Dissolution Study: Brief Introduction and concept	The student will be able to explain the importance of bioavailability	Vidya peter , Assistant Professor 9446908359 vidya@nirmalacp.org	Lecture, demonstration	MCQ	Soft copy, Video link

5.Stability Study - Concept of Expiry date and storage condition, Method to determine the expiry date. Quality of drug product after the expiry	5 . The student will be able to describe the concept and importance of expiry date	Dr Deepa MK Associate professor 8848662717 deepamk@nirmalacp.org	Lecture, demonstration	MCQ	Soft copy, Video link
6.Exposure to the practical aspects of - Comparative dissolution of marketed drug product - Analysis of drug release patterns from various CRDDS - Tablet preparation and assessment of manufacturing variables - Stability data analysis based on literature			demonstration	MCQ	

Module 3: Laboratory Animals and Pharmacological Screening (8 hrs)

Modules	Learning outcomes	Faculty details (Name, Designation, contact details)	Mode of teaching – Topic wise (Lecture, demonstration, training)	Mode of evaluation- (Description/ MCQ/ assignment)	Study materials including references (Hard copy/soft copy/web link/ video link etc)
1. Laboratory Animals 2. Animal house management 3. Route of administration 4. Pharmacological screening of some selected models	Upon Completion of the course the students will be able to acquire the knowledge on laboratory animals and identify the pharmacological screening of drugs	Dr.Karthikeyan M,Professor, 9656111669 karthikeyanpgt@gmail.com Ms.Nancy Jose Associate Professor 9495513593 Ms.Emily James Associate Professor 9446345155 Ms. Parvathy Murli Assistant Professor 9847366397	Lecture Demonstration Training	Description/MCQ /Assignment	Hard Copy

Module 4: Quality control techniques (4 hrs)

Modules	Learning outcomes	Faculty details (Name, Designation, contact details)	Mode of teaching – Topic wise (Lecture, demonstration, training)	Mode of evaluation- (Description/ MCQ/ assignment)	Study materials including references (Hard copy/soft copy/web link/ video link etc)
1. Significance of QC 2. Single component analysis by UV spectroscopy. 3. HPLC analysis of pharmaceuticals and data interpretation. 4. IR spectroscopy - data interpretation	Upon completion of the course the student shall be able to 1. Understand the interaction of matter with electromagnetic radiations and its applications in drug analysis 2. Understand the chromatographic separation and analysis of drugs.	Manu Jose Assistant Professor 9947938832 manu@nirmalacp.org	Demonstration and Hands on training	Assignment	Google classroom link - https://drive.google.com/drive/folders/1bXxv9PFWrcT17NM0XqffzE4TBC1fR2tF?usp=share_link

Module 5: Pharmaceutical care (5 hrs)

Modules	Learning outcomes	Faculty details (Name, Designation, contact details)	Mode of teaching – Topic wise (Lecture, demonstration, training)	Mode of evaluation- (Description/ MCQ/ assignment)	Study materials including references (Hard copy/soft copy/web link/ video link etc)
1 Hands-on training on Drug information software – Micromedex	Train to use, retrieve and assess drug information from Micromedex	Mr. Jobin Kunjumon Asst Professor 9447516995 jobin@nirmalacp.org	Demonstration, training	Assignment	Soft copy, Video link
2.Medication error	Apply knowledge on ME to prevent /minimize the occurrence of ME in clinical practice	Dr. Suja Abraham, Professor, 9995162188 suja@nirmalacp.org	Lecture, Demonstration	Assignment	
3.Drug interaction	Apply knowledge on relevant drug interactions in clinical practice and acquire skill to use Micromedex in identifying and interpreting DI	Dr.Merrin Joseph, Asst.Prof 8848264103 merin@nirmalacp.org	Lecture, demonstration, training	Assignment	
4.Adverse drug reaction	Acquire skills to detect, assess, correlate, manage, report and document ADRs	Dr.Dona Maria Jetto Asst. Prof 8547174493 dona@nirmalacp.org	Lecture, demonstration	Assignment	
5.FDA pharmacovigilance database	Technical competency to retrieve, analyse and interpret pharmacovigilance data	Ms. Antriya Annie Tom Associate Professor 9567884407 antriya@nirmalacp.org	Demonstration, training	Assignment	



NIRMALA

COLLEGE OF PHARMACY

Nirmala Hills, Muvattupuzha P.O,
Ernakulam district, Kerala, India - 686 661

NCP - A

1956

Date: 03-05-2023

MBBS ELECTIVE TRAINING CERTIFICATE

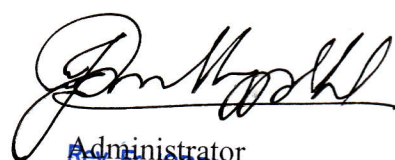
This is to certify that the third-year MBBS student at MOSC, Kolechery, **Ms. Smita Raachel Mathew**, has completed 30 hours of training in the elective subject of Pharmacology on the topic **Pharmaceutical Concepts: Drug Design to Post Marketing Surveillance**. Between the period of 03/04/2023 to 20/04/2023, she was introduced to areas like Molecular docking, Pharmaceutical product development and quality assessment, Laboratory animals and pharmacological screening, Quality control techniques, and Pharmaceutical care.

During this period she was punctual and actively participated in discussions. Her character and conduct were excellent. She was evaluated at the end of the training by assignments and tests.


Principal

Dr. BADMANABAN. R
PRINCIPAL
Nirmala College of Pharmacy
Muvattupuzha, Ernakulam (Dist.)
Kerala - 686 661




Administrator

REV. FR. JORDY J PULLOPPILLY
ADMINISTRATOR
Nirmala College of Pharmacy
Muvattupuzha, Ernakulam Dist.
Kerala - 686 661





NIRMALA
COLLEGE OF PHARMACY

Nirmala Hills, Muvattupuzha P.O,
Ernakulam district, Kerala, India - 686 661

NCP - A

1955

Date : 03-05-2023

MBBS ELECTIVE TRAINING CERTIFICATE

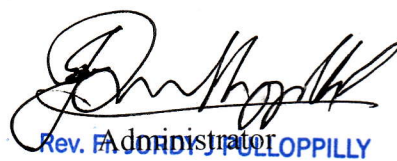
This is to certify that the third-year MBBS student at MOSC, Kolechery, **Ms. Anakha Raj**, has completed 30 hours of training in the elective subject of Pharmacology on the topic **Pharmaceutical Concepts: Drug Design to Post Marketing Surveillance**. Between the period of 03/04/2023 to 20/04/2023, she was introduced to areas like Molecular docking, Pharmaceutical product development and quality assessment, Laboratory animals and pharmacological screening, Quality control techniques, and Pharmaceutical care.

During this period she was punctual and actively participated in discussions. Her character and conduct were excellent. She was evaluated at the end of the training by assignments and tests.


Principal

Dr. BADMANABAN. R
PRINCIPAL
Nirmala College of Pharmacy
Muvattupuzha, Ernakulam (Dist.)
Kerala - 686 661




Rev. Fr. JACOB P. K. P.
ADMINISTRATOR

Nirmala College of Pharmacy
Muvattupuzha, Ernakulam Dist.
Kerala - 686 661





NCP - A

1954

Date : 03-05-2023

MBBS ELECTIVE TRAINING CERTIFICATE

This is to certify that the third-year MBBS student at MOSC, Kolechery, **Mr. Alosious John**, has completed 30 hours of training in the elective subject of Pharmacology on the topic **Pharmaceutical Concepts: Drug Design to Post Marketing Surveillance**. Between the period of 03/04/2023 to 20/04/2023, he was introduced to areas like Molecular docking, Pharmaceutical product development and quality assessment, Laboratory animals and pharmacological screening, Quality control techniques, and Pharmaceutical care.

During this period he was punctual and actively participated in discussions. His character and conduct were excellent. He was evaluated at the end of the training by assignments and tests.


Principal

Dr. BADMANABAN. R
PRINCIPAL
Nirmala College of Pharmacy
Muvattupuzha, Ernakulam (Dist.)
Kerala - 686 661




Administrator

Rev. Fr. JORDY J PULLOPPILLY
ADMINISTRATOR
Nirmala College of Pharmacy
Muvattupuzha, Ernakulam Dist.
Kerala - 686 661





NIRMALA

COLLEGE OF PHARMACY

Nirmala Hills, Muvattupuzha P.O,
Ernakulam district, Kerala, India - 686 661

NCP - A

1953

Date : 03 - 05 - 2023

MBBS ELECTIVE TRAINING CERTIFICATE

This is to certify that the third-year MBBS student at MOSC, Kolechery, **Mr. Abhijith M** has completed 30 hours of training in the elective subject of Pharmacology on the topic **Pharmaceutical Concepts: Drug Design to Post Marketing Surveillance**. Between the period of 03/04/2023 to 20/04/2023, he was introduced to areas like Molecular docking, Pharmaceutical product development and quality assessment, Laboratory animals and pharmacological screening, Quality control techniques, and Pharmaceutical care.

During this period he was punctual and actively participated in discussions. His character and conduct were excellent. He was evaluated at the end of the training by assignments and tests.

P. Badmanaban
Principal

Dr. BADMANABAN. R
PRINCIPAL
Nirmala College of Pharmacy
Muvattupuzha, Ernakulam (Dist.)
Kerala - 686 661



Jordy J Pulloppilly
Administrator

Rev. Fr. JORDY J PULLOPPILLY
ADMINISTRATOR
Nirmala College of Pharmacy
Muvattupuzha, Ernakulam Dist.
Kerala - 686 661





BOARD of GOVERNORS in supersession
of Medical Council of India

**COMPETENCY BASED UNDERGRADUATE CURRICULUM
FOR THE INDIAN MEDICAL GRADUATE**

Knows Knows how Shows Shows how Performs

Describe

Enumerate

Observe

Demonstrate

Assist

Counsel

Prescribe

Analyse

Integrate

Guide

ELECTIVES

Communicate

Module 6

Correlate

Interpret

Critique

Collaborate

Clinician

Communicator Team Leader

Professional

Lifelong Learner

Knowledge

Skills

Attitude

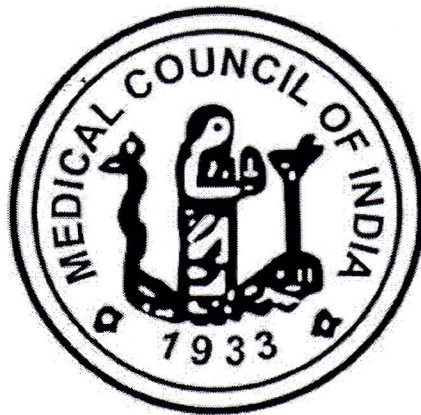
Values

Responsiveness

Communication

Curriculum Implementation Support Program

**Module on Electives
for
Undergraduate Medical Education
Program
2020**



**Medical Council of India
Pocket-14, Sector-8, Dwarka,
New Delhi 110 077**

All rights reserved. No part of this publication/documents may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods, without the prior written permission from the Medical Council of India, except for the use in Curriculum Implementation Support Program by medical teachers and institutions as well as in the case of brief quotations embodied in critical reviews and certain other non-commercial uses permitted by Copyright Law. 2019.

How to cite: Medical Council of India. Electives for the Undergraduate Medical Education Training Program, 2020: p 1- 30.

Dr. Vinod K. Paul

MD, Ph.D, FASc, FNASc, FAMS, FNA

Chairman

**Board of Governors in Super-session of
Medical Council of India**

Sector-8, Pocket-14,

Dwarka, New Delhi-110 077

Ph: +91-11-25367039

Fax: +91-11-25367031

Website: www.mciindia.org



डॉ विनोद कुमार प

एम.डी., पी.एच.डी., एफ.ए.एस., एफ.ए.एन.एस.,
एफ.ए.एम.एस., एफ.एन.ए.

अध्यक्ष

भारतीय आयुर्विज्ञान परिषद के
अधिक्रमण में शासी बोर्ड

सेक्टर-8, पॉकेट-14,

द्वारका, नई दिल्ली-110 077

फोन: +91-11-25367039

फैक्स: +91-11-25367031

वेबसाइट: www.mciindia.org

Foreword ELECTIVES

Students who join medicine come in with many professional and personal aspirations. While meeting the needs of the profession and nation, the MBBS program is also designed to create time and opportunity for students to explore future interests. Allowing students time to experience a specialty or project of their choice is thus key to helping student interest bloom.

Creating a diversity of choices within a specified framework that will allow students to be part of a laboratory, participate in research, be part of a super-specialty care team or interact with patients in a community care setting is a mandate of the new regulations notified by the Government of India. Electives allow students to get a taste of a future career; they also allow them to pursue academic interests, do projects and work in diverse environments. These experiences outside the traditional boundaries of the core program allow students to reflect, plan and grow their careers. They also allow students to begin the process of professional networking early.

Institutions must give sufficient importance to the planning and execution of electives. Besides creating diverse opportunities, thought must be given to providing a safe and enabling environment for students to learn. Identifying and orienting preceptors for this purpose, developing portfolio and log book events and continuous program evaluation are key to the success of the program. I urge all institutions to look beyond traditional boundaries to create areas of opportunity for students. Strategic collaborations with centers of excellence will increase value for students while building bridges of collaborative work among institutions.

This booklet is designed to help institutions plan and execute elective rotations. The Expert Group has elucidated a balanced approach that can be followed by all institutions. As always we are keen to learn and share any best practices that institutions develop. I am grateful to the Academic Cell of MCI and the Expert Group as well as the nodal and regional centers of the MCI for their continued contribution in supporting institutions and teachers in implementing the forward looking changes in the new competency based UG curriculum.

Chairman
Board of Governors

Phone : 25367033, 25367035, 25367036
दूरभाष : 25367033, 25367035, 25367036
Fax : 0091-11-25367024
E-mail : mci@bol.net.in
Website : www.mciindia.org



पॉकेट - 14, सेक्टर - 8,
द्वारका फेस- 1
नई दिल्ली-110 077
Pocket- 14, Sector- 8,
Dwarka Phase - 1
New Delhi-110077

भारतीय आयुर्विज्ञान परिषद् MEDICAL COUNCIL OF INDIA


BOARD OF GOVERNORS
IN SUPERSESSION OF MEDICAL COUNCIL OF INDIA

Foreword

Electives

Changes in the Graduate Medical Education Regulations notified by the Government of India in 2019 have been done with a view to create physicians of first contact who are relevant to both their community and the globe. These regulations aim at defining outcomes and help students work towards these. These Regulations also envisage a broader role for trainees as scholars, researchers and specialists. In order to diversify experience, stimulate interest in research and discover learning beyond primary care, an opportunity has been created in the new MBBS program for the student to undertake electives of his or her choice subject to availability. Two months of elective time one each in the basic sciences or research and the other in clinical sciences or community clinics have been created. Leverage has been given to institutions to create these electives based on local circumstances and perceived need. Elective postings are compulsory for students and its successful completion is necessary for students to be able to attend the final examination.

This booklet is intended as a guide for institutions to plan the elective postings. Institutions are requested to provide the opportunity for students to take electives of their choice, if needed through external collaborations, if such opportunities are limited while following the guidelines mentioned in the Graduate Medical Education Regulations and this booklet. I would like to express my gratitude to the Academic Cell of MCI and the Expert Group whose constant guidance has helped in the successful roll out of the new curriculum.


Secretary General, MCI

	to take Part 2 summative examination	to take Part 2 summative examination
Assessment	Formative Record of activities in log book and portfolio (or annexure to log book) to be submitted as prerequisite to be allowed to take Part 2 summative exam	Formative Record of activities in log book and portfolio (or annexure to log book) to be submitted as prerequisite to be allowed to take Part 2 summative exam
Out of institution experience	Allowed (note clinical postings allowed to continue)*	Allowed within the city*
Out of city or state experience	Continuation of clinical postings makes this difficult	Allowed with due approval*

* See caveat in text

The primary purpose of block 1 is to provide the learner with research experience in basic sciences OR laboratory sciences OR in clinical sciences. The purpose of block 2 is to provide the learner an explorative experience with guided patient care in a specialty of choice.

Electives in both blocks will require planning and coordination by the institution, various departments involved and preceptors who will directly supervise and guide students. Coordination will also be required with external institutions, community clinics and preceptors as may be required for the conduct of electives.

1. Planning the learning experience

The first step in the process is to plan the learning experience. Given the diversity of blocks there will be some variation in the content style and degree of learning; however, each elective should have the following:

- a. defined learning objectives,
- b. an identified preceptor responsible for guiding the student,