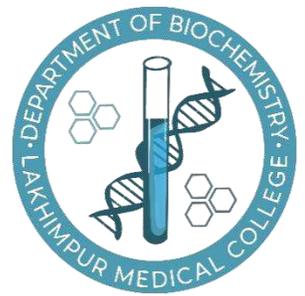


# ACTIVITIES

*Photo of Department*



*Photo of UG Lab*





*Photo of UG Activities*

**3-D Models**



# Projects

## MARVIN CARMIL



Born: 18th April 1911, 29 West MA, USA  
 Died: 18th January 1997, Berkeley, USA  
 Affiliation at the time of award: University of California, Berkeley, CA, USA

**Work:** He identified a cycle of reactions, known as the Calvin cycle, that forms the backbone of photosynthesis. In 1951, he received the Nobel Prize in Chemistry, which honored him for tracing various steps in photosynthesis.



**Legend:**

- 1. CO<sub>2</sub> fixation
- 2. Reduction
- 3. Regeneration

**Other works:** Dr. Carml used to produce synthetic catalysts with which he tackled various scientific challenges. The objective was a device to produce oxygen photochemically from water. Dr. Carml was the author of several books:

1. The Theory of Organic Chemistry (1949)
2. Inorganic Carbon (1949)
3. Path of Carbon in Photosynthesis (1957)
4. Chemical Evolution (1960)

Presented by: Vishal, Shiv, Akshat, Nishu, Parth, Anu, Harsh Sacha, Harsh Duggal, Armaan, Deek, Bhanu, in a grand finale event. Batch 2022-23  
 Venue: Kirti Institute, Sector 10, Gurgaon, Haryana

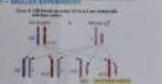
## HERMANN MULLER

“The Nobel Prize in Physiology or Medicine 1948”

Born: 21 September 1890, New York, NY, USA  
 Died: 5 April 1967, Indianapolis, IN, USA

**Work:** “His experiments ‘for the discovery of the production of mutations by means of X-ray irradiation’”

**Work:** In order to explain how organisms’ genes can change (or being exposed to x-rays and how species to arise, a new term was coined in the late 1930s: mutation. Although involving random changes in an organism’s genetic code, Hermann Muller studied the hereditary characteristics of fruit flies and, in 1927, discovered that the number of genetic mutations observed in fruit flies increased when they were exposed to x-rays. He found that the higher the dose of x-rays and other ionizing radiation the flies were exposed to, the greater the number of mutations that occurred.



**RESEARCH BY:**

- 1. Rishabh Pathak (23)
- 2. Anshika Prasad (23)
- 3. Pranshu Singh (23)
- 4. Rishi (23)
- 5. Anshika Prasad (23)
- 6. Anshika Prasad (23)
- 7. Anshika Prasad (23)
- 8. Anshika Prasad (23)
- 9. Anshika Prasad (23)
- 10. Anshika Prasad (23)

Batch 2022-23

## NOBEL LAUREATE SEIMAN A. WAKSMAN

**BIO DATA**

Born: 12 July 1912  
 Death: 12 August 1973  
 Citizenship: United States of America  
 Alma Mater: Rutgers University of California, Berkeley

**Field of work:**

- Microbiology
- Higher education
- Public health and control of infectious diseases
- Education

**Discoveries:** He most notably worked on the discovery of streptomycin for TB in the year 1943.

**DISCOVERY OF STREPTOMYCIN**

During his research to study tuberculosis, he discovered penicillin-like drugs, that were not able to cause further resistance with an immunization. He discovered that streptomycin, which he discovered, prevented the bacteria from multiplying.

**USES OF STREPTOMYCIN**

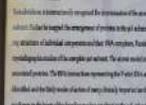
It is used to treat TB, along with other antibiotics. It is also used to treat other bacterial infections. It is used to treat TB, along with other antibiotics. It is used to treat TB, along with other antibiotics.

Presented by: Vishal, Shiv, Akshat, Nishu, Parth, Anu, Harsh Sacha, Harsh Duggal, Armaan, Deek, Bhanu, in a grand finale event. Batch 2022-23  
 Venue: Kirti Institute, Sector 10, Gurgaon, Haryana

## VENKATRAMAN RAMAKRISHNAN

Born: 1942, Chennai, India  
 Died: 2018, Chennai, India  
 Affiliation at the time of award: University of California, Berkeley, CA, USA

**Work:** He discovered the structure of the ribosome, a complex molecular machine that synthesizes proteins. His work was a major breakthrough in understanding the molecular basis of life.



**Other works:** He discovered the structure of the ribosome, a complex molecular machine that synthesizes proteins. His work was a major breakthrough in understanding the molecular basis of life.

Presented by: Vishal, Shiv, Akshat, Nishu, Parth, Anu, Harsh Sacha, Harsh Duggal, Armaan, Deek, Bhanu, in a grand finale event. Batch 2022-23  
 Venue: Kirti Institute, Sector 10, Gurgaon, Haryana

## Robert Leftkowitz & Brian K Koblika

**Discovery of G Protein-coupled receptors**

2012 Nobel prize winner



**Their Work on G Protein**

Some hormones and neurotransmitters bind to G protein-coupled receptors (GPCRs) on the cell surface. This binding activates the G protein, which then activates various effector molecules, leading to a specific cellular response.

Presented by: Vishal, Shiv, Akshat, Nishu, Parth, Anu, Harsh Sacha, Harsh Duggal, Armaan, Deek, Bhanu, in a grand finale event. Batch 2022-23  
 Venue: Kirti Institute, Sector 10, Gurgaon, Haryana

## The Legacy of Dr. Har Gobind Khorana - Nobel Prize Laureate

Dr. Har Gobind Khorana, a pioneer in the field of molecular biology, was awarded the Nobel Prize in 1968 for his work on the genetic code. He was the first Indian to receive this prestigious award.

**His Work:** He discovered the structure of the genetic code, which is the language of life. He showed that the sequence of three nucleotides (a codon) in a messenger RNA molecule codes for a specific amino acid. This discovery was a major breakthrough in understanding the molecular basis of life.



**Other works:** He discovered the structure of the genetic code, which is the language of life. He showed that the sequence of three nucleotides (a codon) in a messenger RNA molecule codes for a specific amino acid. This discovery was a major breakthrough in understanding the molecular basis of life.

Presented by: Vishal, Shiv, Akshat, Nishu, Parth, Anu, Harsh Sacha, Harsh Duggal, Armaan, Deek, Bhanu, in a grand finale event. Batch 2022-23  
 Venue: Kirti Institute, Sector 10, Gurgaon, Haryana

## ROBERT LEVINSKY

**Discovery of the structure of the ribosome**

Robert Levinsky, a pioneer in the field of molecular biology, was awarded the Nobel Prize in 1968 for his work on the genetic code. He was the first Indian to receive this prestigious award.

**His Work:** He discovered the structure of the ribosome, a complex molecular machine that synthesizes proteins. His work was a major breakthrough in understanding the molecular basis of life.



**Other works:** He discovered the structure of the ribosome, a complex molecular machine that synthesizes proteins. His work was a major breakthrough in understanding the molecular basis of life.

Presented by: Vishal, Shiv, Akshat, Nishu, Parth, Anu, Harsh Sacha, Harsh Duggal, Armaan, Deek, Bhanu, in a grand finale event. Batch 2022-23  
 Venue: Kirti Institute, Sector 10, Gurgaon, Haryana

## SIDNEY ALTMAN

**Discovery of the structure of the ribosome**

Sidney Altman, a pioneer in the field of molecular biology, was awarded the Nobel Prize in 1980 for his work on the genetic code. He was the first Indian to receive this prestigious award.

**His Work:** He discovered the structure of the ribosome, a complex molecular machine that synthesizes proteins. His work was a major breakthrough in understanding the molecular basis of life.



**Other works:** He discovered the structure of the ribosome, a complex molecular machine that synthesizes proteins. His work was a major breakthrough in understanding the molecular basis of life.

Presented by: Vishal, Shiv, Akshat, Nishu, Parth, Anu, Harsh Sacha, Harsh Duggal, Armaan, Deek, Bhanu, in a grand finale event. Batch 2022-23  
 Venue: Kirti Institute, Sector 10, Gurgaon, Haryana

## JENNIFER DOUDNA

**Discovery of CRISPR-Cas9 gene editing**

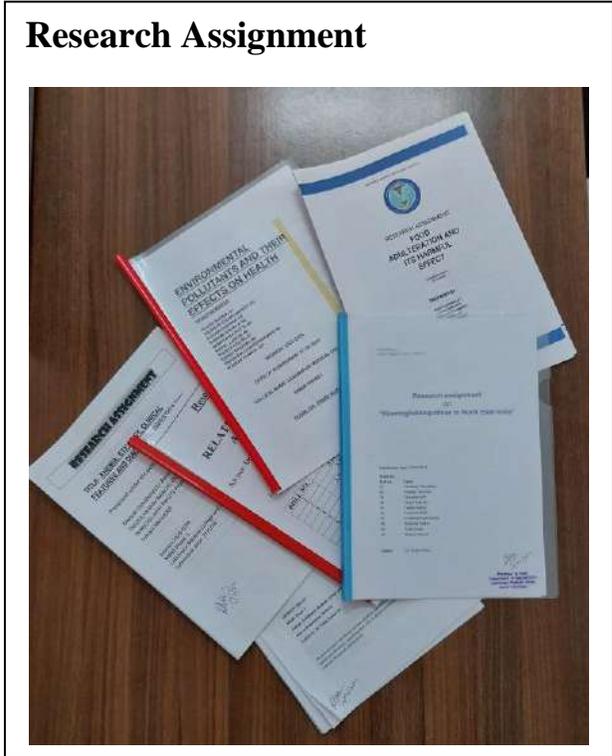
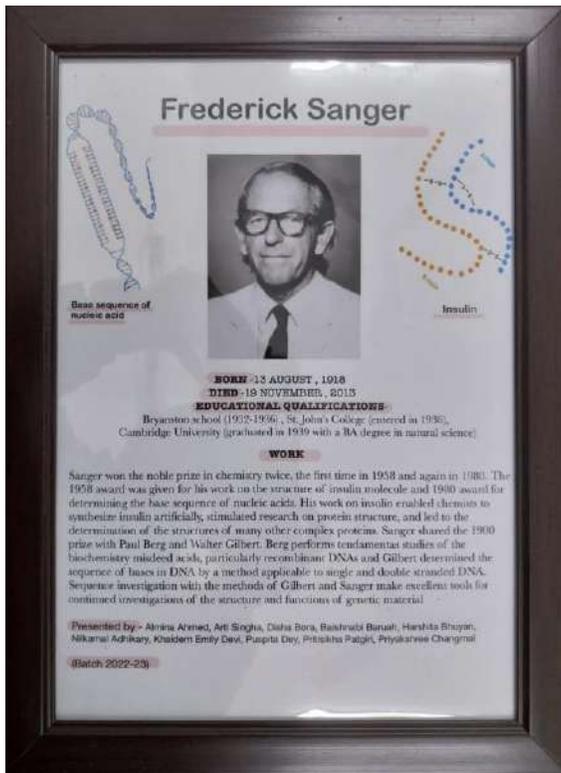
Jennifer Doudna, a pioneer in the field of molecular biology, was awarded the Nobel Prize in 2020 for her work on the genetic code. She was the first Indian to receive this prestigious award.

**Her Work:** She discovered the structure of the CRISPR-Cas9 system, a powerful tool for gene editing. Her work was a major breakthrough in understanding the molecular basis of life.



**Other works:** She discovered the structure of the CRISPR-Cas9 system, a powerful tool for gene editing. Her work was a major breakthrough in understanding the molecular basis of life.

Presented by: Vishal, Shiv, Akshat, Nishu, Parth, Anu, Harsh Sacha, Harsh Duggal, Armaan, Deek, Bhanu, in a grand finale event. Batch 2022-23  
 Venue: Kirti Institute, Sector 10, Gurgaon, Haryana



**Role Play**



## Students Achievement in University Exam

Session	Result	Honours
2021-22	99%	-
2022-23	100%	14
2023-24	100%	01

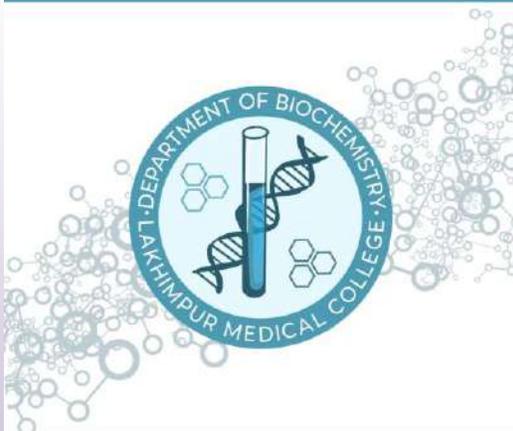


### Quiz

Participated at National Level Quiz competition organized by Indian Medical Association (IMA) & Jaypee Brothers Medical Publishers (P) Ltd. On 13<sup>th</sup> & 14<sup>th</sup> July 2024.

1. Juhi Kumari
2. Saumya Shruti
3. Surbhi Kumari

### BIOCHEMISTRY PRACTICAL MANUAL FOR M.B.B.S



1st Edition  
As Per the Latest Competency-Based  
NMC Curriculum

*Biochemistry Practical  
Manual Published by  
Department of  
Biochemistry, LMCH,  
Nov 2024.*

## Photo of CMEs

**1. Date:** 10<sup>th</sup> September 2022

**Title:** “HAEMOGLOBINOPATHIES: SCENARIO IN NORTH-EAST INDIA”

(Jointly organized by Department of Biochemistry of LMCH & AMCH, under the aegis of Association of Clinical Chemistry and Lab Medicine Practitioners) (1<sup>st</sup> Pre-Conference CME, ACCLMPCON 2022)



**2. Date:** 28<sup>th</sup> March 2023

**Title:** “MONOCLONAL ANTIBODIES PREPARATION AND ITS DIAGNOSTIC AND THERAPEUTIC USES”

(Jointly organized by Department of Biochemistry & Pharmacology, LMCH)





3. Date: 5<sup>th</sup> April 2023

Title: "MOLECULAR TECHNIQUES IN LABORATORY MEDICINE"

(Jointly organized by Department of Biochemistry & Pathology, LMCH)



4. Date: 30<sup>th</sup> March 2023.

Title: "NUTRITIONAL & PUBLIC HEALTH ASPECTS OF VITAMIN DEFICIENCIES"

(Jointly organized by Department of Biochemistry & Community Medicine, LMCH)





5. Date: 3<sup>rd</sup> August 2023.

Title: "INSIGHT INTO A CLINICAL BIOCHEMISTRY LAB"

(Organized by Department of Biochemistry, LMCH)

**QuideOrtho**  
**INSIGHT INTO A CLINICAL BIOCHEMISTRY LAB**  
**CME**  
**3<sup>rd</sup> August 2023, Thursday**  
**SPEAKERS**  
 Prof. Manojkumar Das  
 Dr. Sajida S Kulkarni  
 Dr. Divyanshu Pathak  
 Prof. Ramesh Desai  
 Dr. Trishu Kumar  
 Dr. Gaurav Handique  
**Department of Biochemistry, LMCH**  
 in collaboration with **QuideOrtho**



**6. Date:** 17<sup>th</sup> August 2023.

**Title:** “MOLECULAR, RADIODIAGNOSTIC AND PHARMACOKINETICS ASPECTS OF CANCER AND ANTI- CANCER DRUGS”

(Jointly organized by Department of Biochemistry, Pharmacology & Radiology)



**7. Date:** 31<sup>st</sup> August 2023.

**Title:** “GLAUCOMA: OXIDATIVE STRESS AND IT’S MANAGEMENT”

(Jointly organized by Department of Biochemistry Ophthalmology, Pharmacology & Biochemistry, LMCH.)





8. **Date:** 16<sup>th</sup> May 2024.

**Title:** “SPECTRUM OF HEMOGLOBINOPATHIES IN NE- INDIA”  
(Jointly organized by Department of Biochemistry & Paediatrics, LMCH)



9. Date: 7<sup>th</sup> June 2024.

Title: "SEPSIS: THE SILENT KILLER"

(Organized by Department of Biochemistry Under the Aegis of Association of Medical Biochemists of India) (1<sup>st</sup> CME of Assam Chapter-AMBI)

DEPARTMENT OF BIOCHEMISTRY  
LAKHIMPUR MEDICAL COLLEGE AND HOSPITAL  
NORTH LAKHIMPUR, ASSAM 787051  
Under the Aegis of  
(Association of Medical Biochemists of India)

Continuing Medical Education  
**SEPSIS: The Silent Killer,**  
07<sup>th</sup> June 2024 (Friday), 10:30 am - 3:30 pm, AMBI Assam Chapter  
Haveli Lecture Hall 6, 4<sup>th</sup> Floor, Hospital Building, LMCH

Speakers

 Dr. Anshu Bora, Professor & Head of Biochemistry, Mahaaggar Medical College Hospital	 Dr. Partha Prasad Das, Assistant Professor of Microbiology, LMCH	 Dr. Abhinav Dutta, Assistant Professor of Pathology, LMCH	 Dr. Animesh Baruah, Quality Head, KGMH Multi-Specialty Hospital, Dibrugarh	 Dr. Pooja Baruah, Assistant Professor of Anesthesiology, LMCH
 Dr. Tapan Kumar Saha, Assistant Professor of Surgery, LMCH	 Dr. Suman Das, Professor & Head of Biochemistry, Mahaaggar Medical College			

Organizing Committee

Organizing Chairman Dr. Anshu Bora Head of Biochemistry, Lakshimpur LMCH Lakshimpur	Organizing Secretary Dr. Tapan Kumar Saha Assistant Professor of Surgery, LMCH Lakshimpur	Organizing Member Dr. Animesh Baruah Quality Head, KGMH Dibrugarh	Organizing Member Dr. Pooja Baruah Assistant Professor of Anesthesiology, LMCH Lakshimpur
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REGISTRATION: 07/06/2024, Time: 10:00-10:30 Am (Free but mandatory)





*Photo of CCL lab, Biochemistry*



*Training of Lab Techs*



## *Phlebotomy Room*



## *Report Despatch Room*



## *District Residency Program (DRP)*

SI No	Name of PGT	Institute	Period
1.	Dr Gautom Kumar Das	AMCH	06/03/2023 to 05/06/2023
2.	Dr. Bristi Talukdar	JMCH	01/03/2023 to 30/06/2023
3.	Dr. Tanima Banerjee.	AMCH	06/06/2023 to 05/09/2023
4.	Dr. Dipika Singha.	AMCH	06/06/2023 to 05/09/2023
5.	Dr. Tishusa J. Sangma	JMCH	01/12/2023 to 29/02/2024
6.	Dr. Souvik Pramanik	AMCH	01/03/2024 to 15/06/2024
7.	Dr. Chandraj Gogoi	JMCH	01/10/2024 to 31/12/2024

Year	Seminar (Total number)	Microteaching (Total number)	Journal Club (Total number)
2023	14	10	10
2024	07	09	13

