

DEPARTMENT OF BIOCHEMISTRY

Biochemistry is a basic science that constitutes the foundation of working of livings. In a medical college, medical biochemistry deals with biochemical basis of normal functioning of all systems in human body. In case of any health problem, Biochemical investigation help a physician to reach at a diagnosis. It connects science, medicine and health and creates a framework for understanding how the human body adapts stresses, physical activity and disease. This understanding enables students correlate between biochemistry of a disease and its treatment, contributing to the development of the core skills of a competent doctor.

Biochemistry department is a full fledged department in Government Medical College, Nandurbar which conducts quiz programmers and student seminars on regular basis. The department is equipped to fulfill students need and make them well trained medical professionals, especially in accordance with the latest CBME based curriculum.

Curriculum:

As per the MUHS Nashik, available at

http://www.muhs.ac.in/upload/syllabus/phase1_060812012_1233.pdf.

Goal:

1. To Provide comprehend save knowledge of biochemical basis of normal function softie body.
2. To under stand biochemical basis of diseases.

Educational Objectives:

1. At the end of the course students will be able to describe the biochemical basis of all the systems, Biochemistry of various compounds, their metabolism and interactions of various pathways for well coordinated total body functions.
2. To understand the relative contribution of major biochemical compounds and their metabolism pathways in homeostasis.
3. TounderstandtheClinicalcorrelationofbiochemicalparameterswithvarious diseases.
4. Correlate knowledge of biochemistry with others stemsinhu man being.

Skills: At then do fcourse students should be able to

1. Conduct experiments designed for study of biochemical functions.
2. Distinguishing or Malinda normal results of tests which he/she performs and observing the laboratory.
3. Diagnose the disease condition based on laboratory reports.

FACULTY LIST

Sr.No.	Name	Designation	Qualification	Experience	Medical Registration No.	Photographs
1.	Dr. Sachin Patharkar	Professor & HOD	MBBS, MD	16 years	2004/02/1204	
2.	Dr. Trupti Ramteke	Associate Professor	MBBS,MD	10 Years	2004/04/2170	
3.	Dr. Sarika Argade	Assistant Professor	MBBS,MD	5 Years	2014/02/0333	
4.	Ms. Pranita Kamble	Assistant Professor	M.Sc	3.5 Years	-	

List of non-teaching staff:

Sr. No.	Name of Staff	Post
1.	Shri. Sabir. S.Kazi (Permanent)	Technician (Department)
2.	Mrunali Sonawane	Technician (Department)
3.	Sonali Gavit	Technician (Department)
4.	Rahul Shirsath	Technician (Department)
5.	Tejaswini Sabale	Technician (CCL)
6.	Vijay Bagul	Technician (CCL)
7.	Silviya Vasave	Technician (CCL)
8.	Rina Tadvi	Technician (CCL)
9.	Dhanraj Pawar	Technician(CCL)
10.	Twinkle Vasave	Technician (CCL)
11.	Manika Vasave	Technician (CCL)
12.	Uday Vijaykumar Bagul	Junior Clerk (Department)
13.	Bharati Pawar	Junior Clerk (CCL)
14.	Kailas Bramhane	Junior Clerk (CCL)
15.	Govinda Fulpagare	Junior Clerk (CCL)
16.	Dinesh Patil	Peon (Department)

Duties & Responsibilities

Professor in Biochemistry:

1. To teach UG & PG students in subject.
2. To take tutorial classes.
3. To arrange teaching programme of department in consultation with dean.
4. To guide & conduct research in subject.
5. To be in charge as Head of Department (HOD)
6. To do any other work that may be assigned to him by Dean.

Associate Professor in Biochemistry:

1. To look after the work of Biochemistry
2. To be responsible for lecture, demonstration & practical classes in the subject & any other department work assigned by professor & Dean.
3. To take part in research work & also to help professor in supervision of department work, store & verification.
4. To perform any other duties so may be allotted by the professor & Dean in the interest of departmental work.

Assistant Professor in Biochemistry:

1. To assist the professor in teaching the subject
2. To conduct tutorials and demonstration.
3. To arrange and supervise the practical in the department.
4. To prepare samples for laboratory practical when required.
5. To assist professor in research.
6. To be responsible for the stores and laboratories under his charge.
7. To do duties assigned by the professor or Dean of the college.

FACILITIES

The department of Biochemistry is well equipped and consist of following laboratories:

1. Biochemistry laboratory
2. Central Research laboratory

All the laboratories are provided with adequate infrastructure and equipments to accommodate 25 students.

Equipments:

The department has all the necessary equipments as per NMC norms.

Dr. Sachin ashok patharkar

List of Publications: 18 publications and one book chapter 15/07/2023

1. Patharkar SA, Chougule LR, Girish Vengurlekar S, Shah MP, Parag V. Laboratory characterization of patients with chronic renal failure in resource-limited settings, with special reference to the post-COVID-19 milieu. *Int J Clin Biochem Res* 2023;10(2):140-143
2. Sachin A Patharkar, Neelam J Patil, Laxman R Chougule, Sampat M Kamble, Jalindar Bhimrao Sanap. Total protein estimation and differential leukocyte count of pleural fluid in tuberculosis. *Journal of Cardiovascular Disease Research. JCDR.* 2023; Volume 14 , Issue 3: 876-885.doi: 10.31838/jcdr.2023.14.03.109
3. Patil NJ, Thorat S, Patharkar S, Nerurkar A, Shinde U, Chaugule L, Sanap J, Shinde K. Estimation of urinary delta aminolevulinic acid levels in gasoline and petrol pump workers as an index of lead exposure. *Int J Clin Biochem Res* 2021;8(4):274-277.
4. Mane S, Sakhare V, Patil N, Patharkar S, Bhise M and Dodake KD. Malondialdehyde (MDA), a marker of oxidative stress in Beta Thalassemia major patients. *International Journal of Biomedical and Advance Research* 2019; 10(12): e5182. Doi: 10.7439/ijbar.v10i12.5182
5. Prabhu SS, Patharkar SA, Patil NJ, Sanap JB, Shinde KU, Dalvi RR, Nerurkar AV. Study of serum malondialdehyde and uric acid levels in patients with malaria. *Int J Clin Biochem Res* 2021;8(3):219-221.
6. Patharkar SA, Shaikh UMJ, Patil NJ, Nerurkar AV, Shinde UR. Estimation of urinary delta aminolevulinic acid levels in females of reproductive age as an index of lead exposure. *Biomedical & Pharmacology Journal.* June 2021; Vol. 14(2): 823-827.
7. Prabhu SS, Patharkar SA, Patil NJ, Nerurkar AV, Shinde UR, Shinde KU. Study of malondialdehyde level and glutathione peroxidase activity in patients suffering from malaria. *Journal of Pharmaceutical Research International* 2021; 33(26A): 35-41.
8. Patil NJ, Kalokhe SR, Patharkar SA, Nerurkar AV, Surve PN, Shinde UR. Study of estimation of urinary delta aminolevulinic acid levels as an indicator of lead exposure in pottery workers. *Asian Journal of Medicine and Health* 2020; 18(8): 58-63.
9. Patil NJ, Bhatt PV, Patharkar SA, Nerurkar AV, Surve PN, Bhatia K. Determination of delta aminolevulinic acid levels in urine; a sensitive indicator of lead exposure in construction workers. *Al Am een J Med Sci* 2020; 13(3): 172-177.
10. Patharkar SA, Jain SH, Nerurkar AV, Patil NJ, Surve PN. Estimation of urinary delta aminolevulinic acid (δ -ala) levels in students of age group 15 to 25 years as an index of lead exposure. *International Journal of Biochemistry Research & Review* 2020; 29(4): 12-16.
11. Patharkar SA, Bavikar JS, Bokankar DK. A prospective study to evaluate thyroid function tests in post-menopausal females at a tertiary care hospital in India. *Walawalkar International Medical Journal* 2019; 6(1):43-48.

12. Patharkar SA, Benwal SJ, Nerurkar AV, et al. Estimation of urinary delta aminolevulinic acid levels in garage workers as an index of lead exposure. *Indian J Med Biochem* 2019; 23(3):312–315.
13. Mane SM, Patil NJ, Patharkar SA, Bangar MG. Effect of nutrition on copper and zinc concentrations in human milk. *Int J Res Med Sci* 2019; 7:96-100.
14. Mane SM, Patil NJ, Nerurkar AV, Patharkar SA. The study of biochemical composition of breast milk in malnourished mothers versus well-nourished mothers. *International Journal of Recent Trends in Science and Technology*. May to July 2018; 27(3): 13-16.
15. Patharkar SA, Chavan S, Phadke MS, Patil NJ, Bokankar DK. Estimation of urinary δ aminolevulinic acid levels (δ -ala) in children of age group 1 to 5 years as an index of lead exposure. *MRIMS J Health Sciences* 2018; 6(1):16-19.
16. Bokankar DK, Patharkar SA, Patil VP. Can apolipoproteins should be considered as index of risk factor than total cholesterol and traditional lipids? *International Journal of Recent Trends in Science and Technology* June 2014; 11(2):127-132.
17. Patharkar SA, Bavikar JS, Bardapurkar JS. Thyroid function is associated with coronary artery disease in postmenopausal females. *The Antiseptic* April 2010; Vol 107 No 4:170 – 174.
18. Syeed AJ, Patharkar SA, Thorat AP. Glycated Hemoglobin (HBA1c)" as a Investigatory tool in Diabetes – Present Scenario. *The Antiseptic* April 2007; Vol 104 No 4:218 – 221.
19. Book chapter

Patil NJ, Kalokhe SR, Patharkar SA, Nerurkar AV, Surve PN, Shinde UR. Study of estimation of urinary delta aminolevulinic acid levels as an indicator of lead exposure in pottery workers In: Dr. Ashraf Talaat Youssef editors. *Highlights on Medicine and Medical Research Vol. 2*. Hooghly, West Bengal, India: B P International; 13 February 2021, Page 79-85.

Awards

1. Honorary Professor of IMA-CGP - The Award of IMA Professorship conferred on the occasion of Teachers Day on September 5, 2021 at Indian Medical Association (HQs.), New Delhi.
1. Maharashtra State Corona warrior award - Indian Medical Association, Maharashtra state.
2. Indian Medical Association Mumbai Branch Corona warrior award
3. Nair Hospital Corona warrior award, Mumbai.
4. Jeevan Prabhodhini Trust, Mumbai Corona warrior award.
5. Special Appreciation Corona warrior award South east Asia from Becton, Dickinson and Company (American multinational medical technology company)
6. Aam Admi Party Corona Warrior award, Mumbai
7. President' s Appreciation award 2017-18, This award is awarded as token of appreciation for IMA members for their sincerity and hardwork in organization working, Indian Medical Association Mumbai Branch 01/04/2018
8. Extempore Elocution second prize 2020 This prize for Extempore Elocution Competition for Dr. V. H. Salaskar Rotating trophy Indian Medical Association Mumbai Branch 01/03/2020
9. Extempore Elocution Second Runner Up Prize 2017 This prize for Extempore Elocution Competition for Dr. V. H. Salaskar Rotating trophy. Indian Medical Association Mumbai Branch 05/03/2017

10. Nair Hospital Staff Society 2014-15 In Appreciation of my contribution as Executive Committee Member staff Society Nair Hospital Topiwala National Medical College and BYL Nair Charitable Hospital Staff Society 2014-1526/04/2015
11. National Merit Scholarship 1998
- 12.

For taking tireless efforts and providing services during COVID 19 pandemic as a PG Hostel Warden at TNMC and BYL Nair Charitable Hospital, Mumbai.

For taking tireless efforts and providing services for the care of patients suffering from COVID 19.

Dr. Trupti Diwan Ramteke

1. **Ramteke T**, Maksane S, Chalak A. Association of inflammatory biomarkers with COVID -19 disease severity in patients of Tertiary Care Hospital, Mumbai: A retrospective study. National Journal of Laboratory Medicine. 2021 Oct, Vol-10(4): BO09-BO13
2. **Ramteke TD**, Chalak AS, Maksane SN. Sigma Metrics: A Powerful Tool for Performance Evaluation and Quality Control Planning in a Clinical Biochemistry Laboratory. 2021;15(3):BC20-BC23.
3. **Trupti Ramteke** , Rajesh Jambhulkar, ArunTadas, Prakash Kute. Study of alterations of serum copper and zinc in patients of cervical cancer. Indian journal of basic and applied medical research. Sept 2015,4(4) 91-99
4. Rajesh Jambhulkar ,**Trupti Ramteke** , AahishAnjankar , Pankaj Kamble. Comparison of lipid profile in pre and postmenopausal women. Inter J Sciand Tech April 2015; 14(3): 631-635
5. Mahendra R. Pakhale, **Trupti Ramteke**, ArunTadas. Changes in lipid profile and liver enzymes in HIV infection and AIDS patients. International journal of scientific and research publications. Sept 2015,5(9)
6. Sonawane TD, **Ramteke TD**. The impact of PowerPoint presentation over blackboard teaching in first year MBBS students. International Journal of Recent Trends in Science And Technology 2015,3(3E)271-273

Dr. Sarika Argade

- Argade S., Shendye R. High sensitivity C- Reactive protein levels and lipid profile in ischemic and hemorrhagic stroke. International journal of clinical and biomedical research 2019 ; 5 (2) ;42-45.
- Argade S, Shendye R. A study of diagnostic utility of serum ischemia modified albumin and IMA index in ischemic stroke and hemorrhagic stroke patients. Medpulse International journal of Biochemistry February 2019; 9(2);51-55
- Dhawale A, Bokankar D, Aragad S, kale B, Bisalbuminemia: An Uncommon finding on Serum Electrophoresis. Journal of Clinical And Dignostic Research . 2022 Aug, Vol-16(8):BD01- BD02.
- Aghade S, Argade S. chandekar, B, Bavikar J. Assessment of cardiac biochemical markers cystatin C and lipoprotein (a) and their relationship with glycemic control in type 2 diabetes mellitus patients. J med Sci Res. 2023 ; 11(3) ; 163-168.

Miss, Pranita Kambale

- Publication; International journal of biotechnology and biochemistry ISSN 0973-2691 COLUME 14 ,No. 1 2018 pp 45-49.
- Estimation of serum methylglyoxal level in type II Diabetes Mellitus.

