

## Department of Pharmacology

Pharmacology is the branch of medicine and biology concerned with the study of drug action. More specifically, it is the study of the interactions that occur between a living organism and chemicals that affect normal or abnormal biochemical function. If substances have medicinal properties, they are considered pharmaceuticals. The field encompasses drug composition and properties, interactions, toxicology, therapy, and medical applications and antipathogenic capabilities. The two main areas of pharmacology are pharmacodynamics and pharmacokinetics.

Pharmacology is all about “finding out how drugs work”. It is concerned with the effects of drugs on living organisms and their components such as cells, membranes, organelles, enzymes and DNA. Pharmacology affects us all, almost every day.

### Department Staff:

Sr. No.	Name	Qualification	Designation
1.	Dr. Naziya I. Khan (Tamboli)	M. Pharmacy (Pharmacology)	Associate Prof., HOD Pharmacology

### Objectives:

To perform the study of practical aspects of anatomy and physiology, pathophysiology and clinical biochemistry of human system

To study major drug classes and prototype drugs with their mechanism of action.

To perform In-Vivo and In-Vitro experiments on animals and their isolated tissues

To perform various research activities of crude drug and synthetic drug for its pharmacological evaluation.

### List of Major Equipment

Sr. No.	List of Major Equipment	Sr. No.	List of Major Equipment
1	Centrifuge machine electrical	20	Spignomanometer
2	Haemocytometer	21	Rabbit holder

3	Medical Microscope	22	Plethosmograph
4	Medical Microscope	23	Aminal Cages
5	Electronic Balance	24	Feeding Bottle
6	LCD Projector	25	pole climbing apparatus
7	Student Organ Bath	26	counting chamber
8	Sherrington Recording Drum	27	Digital Plethismometer
9	Spirometer	28	Digital Balance
10	Analgesiometer	29	Colorimeter-EQ650A
11	Student Organ Bath	30	Sherrington Recording Drum
12	Actophotometer	31	Stethoscope
13	Rotarod	32	Muscale Electrode
14	Analgesiometer (Eddies Heat Method)	33	Lucas Moiest Chamber
15	Plethysmograph	34	Stimulator

16	Student Organ Bath	35	Histamine Chamber
17	Sherrington Recording Drum	36	Follin-WU-Tube
18	Haemocytometer with micropipe He	37	Artery Forcip
19	Stethoscope	38	Dissecting Miceroscope bress parts labline

### Department Achievements:

- Poster Presentation on Pharmacogenomics- A new era in research studies. Presented at a National Level Seminar on “CNS Disorders” and Workshop on “Development of Zebra fish facility and handling of animals” Organized by Dr. L.H. Hiranadani College of Pharmacy, Ulhasnagar, Mumbai. Dated 7-8th September 2018.
- 2nd Prize winner- Poster Presentation on “Hepatoprotective activity of Mimosa Hamata wild plant” at Avishkar competition organized by “Solapur University, Solapur.” Dated 23-24<sup>th</sup> December 2018.
- Poster Presentation on “Formulation and Development of Antitussive Lozenges for pediatric patients” at Avishkar competition organized by “Solapur University, Solapur.” Dated 23-24<sup>th</sup> December 2018.
- 2nd Prize winner –Model Competition at State Level Poster and model presentation organized by “Rajaram babu college of pharmacy, Kasegaon Dated 16th February 2019.
- Poster Presentation on “Artificial Intelligence” at State Level Poster and model presentation organized by “Rajaram babu college of pharmacy, Kasegaon Dated 16th February 2019.
- First Prize winner- Mrs Naziya Khan bagged the first prize in teacher level (pursuing Ph. D.) category in Medicine and Pharmacy discipline in university level Avishkar 2019-20 hosted by Shri Sant Damaji Mahavidyalaya, Mangalwedha, Dist-Solapur, and Maharashtra.

- 02 research articles were published in National and International Pharmaceutical journals.
- Mrs. Tamboli Naziya Ashpak Secured 1<sup>st</sup> Rank in “Aviskar Competition held by P. A. H. Solapur University , Solapur for A.Y. 2019-20.
- Mrs. Tamboli N.A got the Bharat Gaurav Puraskar by KTK Outstanding Achievers & Education Foundation, Delhi in A.Y.21-22.
- Mrs. Naziya Ashpak Tamboli was awarded with Ph.D. in A.Y. 2021-22.
- Mr. Tejas Gaikwad ( D.PharmII<sup>nd</sup> year) secured the 1<sup>st</sup> Rank in State Level E-Poster Presentation Competition organized by Shri SantGajananMaharaj College of Pharmacy, Buldana on 3<sup>rd</sup> Feb 2022.
- Mr. Tejas Gaikwad ( D.PharmII<sup>nd</sup> year) student got the 3<sup>rd</sup> Rank in State Level Online Podcast Making Competition on 28 Feb 2022, organized by VasantidaviPatil Institute of Pharmacy, Kodoli,Ta: Panhala, Kolapur.

**Ongoing Research Activities:**

Phytochemical & Antihaemorrhoidal activity of Parkinsonism Acculata leaves.

Antihelmintic activity of non aqueous extract of Tectoniagrandislinn leaves.

Synthesis of silver nanoparticles using leaves of Cryptostegia grandiflora.

Evaluating medicines dispensing patterns at private community pharmacies in Sangola, India.