

Name of the Faculty: Dr. Anuradha Majumdar, B Pharm, M Pharm, Ph D (Tech) in Pharmacology

Current Designation:

- Associate Professor of Pharmacology, Bombay College of Pharmacy, Kalina, Mumbai (1999-till date)
- Chairperson of CCSEA approved IAEC of Animal House
- Former Dean, Faculty of Science and Technology, University of Mumbai since 1st
 November 2019 (Statutory Position as per Maharashtra Public University Act, 2016)
 till 10th September 2022
- Former member of University of Mumbai Senate, Management Council, Academic Council, Board of Deans, Member Secretary of Board of IT, Chaired Faculty of Science and Technology etc.

Email: anuradha.majumdar@bcp.edu.in

Teaching Fields: Anatomy, Physiology, Pathophysiology, Pharmacology, Toxicology, Pharmacovigilance and Clinical Pharmacy

Recent Prestigious International Transdisciplinary Project:

• **Title of project**: Microplastic Pollution from Ports and Shipping Activities in the Indo-Pacific: Potential Risks and Mitigation Strategies, **Collaborator**, University of Tasmania, Australia, **Funding Authority**, Department of Foreign Affairs and Trade, Australian Government, Australia India, Indo Pacific Oceans Initiative Partnership (AIIPOIP), Second Grants Round 2021-22

Recent Prestigious National Project:

• **Title of Project**: Exploring Herbal Bioactives and Extracts: Integrative Approaches in Treatment of HSCT TATMA and HVOD, CRP-BRNS DAE Project (2024-27)

Ongoing:

- -APTI Womens Forum, Western Zone Coordinator
- -Editor, Pharma Times (1st October 2024-30th September 2026)
- -Invited Faculty at IISER, Trivandrum to engage course "Pharmacology and Pharmacokinetics"

Educational Qualifications:

Sr. No.	Institution/University /Board	Degree Awarded	Year	Field of Study
1.	Maharashtra State Board of Secondary and Higher Secondary Education Board, India	S.S.C	1988	
2.	Maharashtra State Board of Secondary and Higher Secondary Education Board, India	H.S.C	1990	Science
3.	Department of Pharmaceutical Sciences, Nagpur University, India	B. Pharm	1994	Pharmaceutical Sciences
4.	Department of Pharmaceutical Sciences, Nagpur University, India	M. Pharm	1996 (Gold Medal ist)	Pharmacology
5.	Bombay College of Pharmacy, University of Mumbai, India	Ph. DTech	2006	Pharmacology
6.	GATE-94	92.08 Percentile All India Rank 94	1994	Pharmaceutical Sciences

Research Publications: International 42, National 10, General 1

Patents: 06 Indian patents granted

Book: 1, **Book Chapter:** 9

Trademark:

- 1. Filed Trade Mark for "**Health Hamesha**TM" for a developed Mobile and Internet App on Health Information for common citizens in English and many Indian native languages.
- 2.Filed Trade Mark "StriShaTM" in 2023 and Launched Mobile App of Strisha on 9th June 2023. It's a contraceptive pill reminder app available on playstore with information to create awareness on contraceptive pills in English, Hindi and Marathi.
- 3. Granted Trademark "Creatinometer TM" in 2023, Trademark no 5870400, granted 10/03/2024

International Conferences attended and paper presented through UGC travel grant: UK, Taiwan, France and USA

Google Scholar: Citations: 1304, h-index: 19, i10 index: 31

M Pharm (Pharmacology) Guided: 100 Degree received: 80

Ph D Tech (Pharmacology) Completed: 8

Government Grants Received: 15 (AICTE, UGC, DBT, DBT-BIRAC, DST, University of Mumbai, Indo Australia DFAT, BRNS-DAE etc)

UGC Travel grants: 4,

Industry Projects: 19 (since 2006)

Recipient of Cipla Innoventia Project

National and International Presentations: 69

Awards: 18

Recent Publications (in last 5 years):

International Publications

- 1. Ashok Choudhary, Sakshi Mahajan, Anuradha Majumdar, Nose to brain delivery of flurbiprofen from a solid lipid nanoparticles-based thermosensitive in-situ gel. Neuroscience Applied 3 (2024) 104062
- 2.Prashant Dongre and Anuradha Majumdar, Network Pharmacology Analysis of Chandraprabha Vati: A New Hope for the Treatment of Metabolic Syndrome. February 2024, Journal of Ayurveda and Integrative Medicine, https://doi.org/10.1016/j.jaim.2024.100902, Impact factor: 2.4
- 3.Rini Varghese and Anuradha Majumdar "All-trans-retinoic acid and valproic acid: A combinatorial approach for the treatment of nephrotic syndrome", Current Research in Biotechnology 7 (2024), https://doi.org/10.1016/j.crbiot.2024.100181, Impact factor:
- 4. Hasnat Khan, Shivangi Patel, Anuradha Majumdar, Green tea as SIRT1 and SIRT3 activator in COVID-19: A molecular docking approach, Indian Journal of Natural Products

and Resources, Vol. 14(3), September 2023, pp 409-424, DOI: 10.56042/ijnpr.v14i3.5397, Impact factor: 0.192

- 5. Shivangi Patel, Arnika Pangarkar, Sakshi Mahajan, Anuradha Majumdar, "Therapeutic potential of endoplasmic reticulum stress inhibitors in the treatment of diabetic peripheral neuropathy", Metabolic Brain Disease, https://doi.org/10.1007/s11011-023-01239-x, Impact factor: 3.584
- **6.** Shivangi Patel, Hasnat Khan, Anuradha Majumdar, Crosstalk between Sirtuins and Nrf2: SIRT1 activators as emerging treatment for diabetic neuropathy, Metabolic Brain Disease, https://doi.org/10.1007/s11011-022-00956-z, Impact factor: 3.584
- 7. Karan Devasani, Anuradha Majumdar, Dimple Jhonsa, Rachna Kaul "Pyrroloquinoline Quinine inhibits PCSK9, augments LDLR recycling and enhances the effect of atorvastatin. bioRxiv preprint doi:https://doi.org/10.1101/2022.03.20.485060
- 8.Rini Varghese, Anuradha Majumdar, A new prospect for the treatment of nephrotic syndrome based on network pharmacology analysis, Current Research in Physiology (2022), Volume 5, Pages 36-47, DOI 10.1016/j.crphys.2021.12.004, Cite score 1.5. (Impact Score 2.42)
- 9.Hasnat Khan, Shivangi Patel, Anuradha Majumdar, Role of NRF2 and Sirtuin activators in COVID-19, Clinical Immunology 233 (2021) 108879 https://doi.org/10.1016/j.clim.2021.108879, Impact Factor: 8.6
- 10.Rini Varghese, Anuradha Majumdar, Current Therapies in Nephrotic Syndrome: HDAC Inhibitors, an Emerging Therapy for Kidney Diseases. Current Research in Biotechnology, May 2021, 3(10141), https://doi.org/10.1016/j.crbiot.2021.05.007, Impact factor: 5.6
- 11. Jagruti Thoke, Shivangi Patel, Anuradha Majumdar, Understanding Skin Chronobiology to Unveil and Transform Dermal Chronotherapeutics: Paving the way for the Future. Chronobiology in Medicine, March 2021, 3 (1), DOI: 10.33069/cim.2020.0032
- 12. Ajit Magar, Karan Devasani, Anuradha Majumdar, Melatonin ameliorates neuropathy in diabetic rats by abating mitochondrial dysfunction and metabolic derangements. Endocrine and Metabolic Science 1 (2020) 100067, https://doi.org/10.1016/j.endmts.2020.100067, CiteScore 1.9

- 13.Karan Devasani, Rachna Kaul, Anuradha Majumdar, Supplementation of pyrroloquinoline quinone with atorvastatin augments mitochondrial biogenesis and attenuates low grade inflammation in obese rats, European Journal of Pharmacology, Volume 881, 15 August 2020, 173273, https://doi.org/10.1016/j.ejphar.2020 (Impact Factor: 5.195)
- 14.Miten Mehta, Dievya Gohil, Navin Khatry, Rajiv Kumar, Santosh Sandur, Deepak Sharma, Rahul Checker, Beamon Agarwal, Dhruv Jha, Anuradha Majumdar, Vikram Gota, Prevention of acute graft-versus-host-disease by Withaferin a via suppression of AKT/mTOR pathway. International Immunopharmacology 84 (2020) 106575, https://doi.org/10.1016/j.intimp.2020.106575 (Impact factor: 5.714)
- 15.Karan Devasani, Anuradha Majumdar, Pyrroloquinoline quinone attenuates obesity associated low grade inflammation, Obesity Medicine 16, 2019, 100134, https://doi.org/10.1016/j.obmed.2019.100134 (Journal impact factor 1.5)
- 16.Bhakti Sadarani, Anuradha Majumdar, Shalaka Paradkar, Anupam Mathur, Satbir Sachdev, Bhabani Mohanty, Pradip Chaudhari. "Enhanced skin permeation of Methotrexate from penetration enhancer containing vesicles: In vitro optimization and in vivo evaluation". 114: 108770, 2019, Biomedicine and Pharmacotherapy, 114, 2019, DOI https://doi.org/10.1016/j.biopha.2019.108770 (Impact factor: 7.5).
- 17. Saili Dharadhar, Anuradha Majumdar, Sagar Dhoble & Vandana Patravale (2018): Microneedles for transdermal drug delivery: a systematic review, Drug Development and Industrial Pharmacy, DOI: 10.1080/03639045.2018.1539497 (Impact factor 3.727)

Patents:

1. Granted Indian Patent no: 251524, with the title "A NOVEL PHARMACEUTICAL COMPOSITION OF TOPICAL METHOTREXATE IN CHRONIC INFLAMMATORY CONDITION" and the application number is 1684/MUM/2008 dated 08/08/2008 wherein the invention is based on the discovery of topical methotrexate gel composition which can be used for the treatment of chronic inflammatory disease, such as rheumatoid arthritis.

Inventors: Dr. Anuradha Majumdar and Mrs. Norma Andrades.

- Granted Indian Patent no 342562, with the title "Matrix type microneedle patches containing keratolytic agents" dated 23/5/2017.
 Inventors: Dr. Anuradha Majumdar and Saili Dharadhar.

 Patent Assigned to Cipla Ltd. Collaborative research and grant received on optimization and scale up. Completed 2023
- 3. Granted Indian Patent no:368640, with the title "Novel composition of micronutrients for protection against non-ionising radiation" dated 25/5/2017.

 Inventors: Dr. Anuradha Majumdar and Ankush Pokarna.
- 4. Granted Indian Patent no:381778, with the title "A unique neutraceutical composition to combat colonic inflammation" dated 4/7/2017

Inventors: Dr. Anuradha Majumdar and Asmita Abhyankar

5. Granted Indian Patent no: 522398 with the title "Combinatorial and chrono-pharmacology guided multi-target integrated holistic combination treatment for nonalcoholic fatty liver disease and nonalcoholic steatohepatitis." dated 27/06/2023

Inventors: Dr. Anuradha Majumdar and Sanket Shirodkar

6. Granted Indian Patent no: 526934, with the title, "A Hyperkeratotic skin penetrating dissolvable microneedle patch and its formulation." dated 16/11/2022 and amended on 21/11/2022

Inventors: Dr. Anuradha Majumdar, Jagruti Thoke and Shweta Sawant

Trademark:

- 1. Filed Trade Mark for "**Health Hamesha**TM" for a developed Mobile and Internet App on Health Information for common citizens in English and many Indian native languages.
- 2. Trademark "StriShaTM" in 2023. Tools including the digital tool such as mobile app to increase awareness on sexual, reproductive, general health, overall wellbeing and the remedial measures. Launched oral contraceptives information app available at play store in June 2023 with feature of pill reminder for improving compliance, Trademark no 5804100 granted 16/06/2024
- 3. Trademark "CreatinometerTM" in 2023, Trademark no 5870400, granted 10/03/2024

Consultancy services:

Marico Ltd.	
(2009)	
Shreya Life Sciences Pvt. Ltd.	
(2011)	
St. John Institute of Pharmacy & Research	
(2014)	
Sandu Pharmaceutical Ltd	
(2015)	
Institute of Chemical Technology (ICT)	
(2015)	
MET Institute of Pharmacy	
(2015)	
H.K. College of Pharmacy	
(2016)	
(2010)	
Yasham Speciality Ingredients Pvt. Ltd.	
(2016)	

Lamar Group of companies		
(2017)		
Ayurchem Pvt Ltd		
(2017)		
Charak		
(2017)		
Hindustan Unilever Ltd.		
(2018)		
Millenium Herbal Care Ltd.		
(2018)		
Pfizer Ltd.		
(2018)		
Zytex Biotech Pvt Ltd.		
(2019)		
Cipla Ltd		
(2019)		
Macleods Pharmaceuticals Ltd.		
(2023)		
Allwin Medical Devices		
(2024)		
Pfizer Ltd (2024)		

Sr. No.	Region	Company/Institute	Date of MOU
1	Mumbai	Lamar Natural product Pvt. Ltd.	11/01/17
2	Mumbai	Tata Memorial Hospital	25/05/2018 renewed 2022
3	Mumbai	Pfizer Limited 20/04/18	
4	Bengaluru	Aprus Biomedical Innovation Pvt.Ltd.	14/08/2017
5	Mumbai	Yasham P2D Life Science Pvt. Ltd 10/12/2013	
6	Mumbai/Delhi	Tripartite agreement BIRAC- BCP- 14/10/2014 Yasham P2D Life Sciences	
7	Mumbai	Cipla Ltd.	10/05/2019
8	Mumbai	Synergia Life Sciences Pvt. Ltd 02/06/2022	
9	Mumbai	Sundyota Numandis Probioceuticals 06/01/2023	
10	Mumbai	Sardar Patel Institute of Technology 11/08/2023	
11	Mumbai	Pfizer Ltd, Consultant Speaker, SEAL 11/01/2024 Programme	

Collaborations:					
Sr no	Institution	Area of collaboration			
1.	IIT Bombay, Mumbai	Study of Biological impact of non-ionizing radiation			
2.	ACTREC, Mumbai	Cancer research-GVHD after allo BMT			
3.	Tata Memorial Hospital, Mumbai	Adverse Drug Reaction Monitoring in Cancer wards			
4.	NIRRH, Mumbai	Studies on Intrauterine Contraceptive Devices			
5.	University of Tasmania, Australia shipping activities in the Indo-Pacific:	Microplastics pollution from ports and Potential risks and mitigation strategies			
6.	Sardar Patel Institute of Technology wards	Adverse Drug Reaction Monitoring in Cancer			

Antibiotic Stewardship Programme

Prescription Audit

Research Area and interest: Research Thrust: Network and Systems Pharmacology, Preclinical experimental pharmacology with focus on metabolic conditions with allied disorders and Neuropharmacology, Exploration in the area of mitochondrial biogenesis, Toxicology with focus on environmental toxicants eg.micro and nanoplastics, Novel drug delivery systems with focus on dermal and transdermal products

Expertise and instrumental/research facilities you can provide to interested parties: Myself and the department are open but not limited to industry projects relating to

- In vivo preclinical evaluation for pharmacological activity using drosophila, rodents and/or zebra fish.
- Dose finding, Safety and Toxicological studies as per OECD guidelines.
- Providing proof of concept of drug delivery device via in vivo testing
- Providing proof of concept of a diagnostic device via *in vivo* testing
- Bioavailability studies for a novel drug formulation
- Pharmacovigilance

7. Hiranandani Hospital

8. Saifee Hospital

- Scientific/Medical Writing
- Subject Matter Expert (SME) in Pharmacology, Toxicology and Drug Strategies and Rationale

Facilities:

CCSEA approved animal house (Rodents and Zebra Fish)

- Mammalian cell culture lab with fluorescence microscope
- Zebrafish housing and Breeding facility
- Drosophila laboratory
- Data Acquisition laboratory
- Histopathology/Immunohistochemistry

Specialized Equipments:

- Stereotaxic apparatus
- Nanomite pump
- Western blot and gel electrophoresis

with Gel doc system

- RT-PCR
- Microplate reader
- Gamma counter for radioimmunoassay of insulin and estradiol
- HPLC with UV/PDA/RF detectors
- Inverted light and fluorescence microscope
- Apparatus for behavioral analyses (with video tracking) in rodents and fish
- Cryostat Microtome
- Western Blot System