

#### NIRMALA COLLEGE OF PHARMACY

Approved by Govt. of Kerala, AICTE and PCI, New Delhi website: www.nirmalaacp.org; Email: nip\_mvpa@yahoo.co.in

**MUVATTUPUZHA** 









# REVAS LETTER PHARMAESSENCE

VOL 9. ISSUE: 1. JULY 2024



His Excellency Rt. Rev. Dr. George Madathikandathil Patron



Rev. Dr. Msgr.

Pius Malekandathil

Manager

# Administrator's message



Rev. Fr. Jose Pulloppillil

ear members of the Nirmala College of Pharmacy Community, I am thrilled to present the ninth volume of Pharmaessence, our esteemed newsletter that celebrates the remarkable achievements and endeavors of our faculty and students. It is with immense pride that I share with you some of the notable milestones we have accomplished during the academic year 2023-2024.

As we reflect on the achievements of the past year, I extend my heartfelt congratulations to everyone who has contributed to our success. Your unwavering dedication and hard work have been instrumental in shaping Nirmala College of Pharmacy into a beacon of excellence in pharmaceutical education and research.

Nirmala College of Pharmacy has been recognized with the prestigious NAAC A+ grade, a testament to our commitment to academic excellence, infrastructure development, and quality education. This achievement underscores our relentless pursuit of high standards in pharmaceutical education. Furthermore, our institution had the privilege of hosting the NILA National Conference, a global platform that brought together experts and scholars from around the world to discuss cutting-edge research and advancements in the field of pharmacy. This event not only showcased our capability as a leading research center but also facilitated knowledge exchange and collaboration.

Throughout the year, our faculty members, known for their dedication and expertise, have continued to mentor and inspire our students. Their guidance has nurtured intellectual and professional competence among our young minds, equipping them with the skills and values necessary to excel in their chosen careers.

I invite you to delve into the pages of Pharmaessence and celebrate the stories of innovation, collaboration, and success that define our institution. Together, let us continue to strive for excellence and make a meaningful impact in the field of pharmacy and beyond.

Warm regards,

Fr. Jose Pullopillil

# Principal's message



Prof. Dr. Badmanabhan R

ear Faculty, Staff, Students, and Friends of Nirmala College of Pharmacy,

It is my pleasure to address you through the pages of 'Pharmaessence' as we reflect on another remarkable year of achievements and growth at our esteemed institution.

Throughout the academic year 2023-2024, Nirmala College of Pharmacy has continued to uphold its commitment to excellence in pharmaceutical education, research, and community engagement. Conduct of Nila 2023 National Conference, NAAC accreditation with A+ grade, conduct of Persona 2024 were some of the major milestones of this academic year.

We are particularly proud of the strides we have made in research and innovation. Our faculty and students have been at the forefront of groundbreaking discoveries and collaborations, contributing significantly to advancements in pharmaceutical sciences. The success of our institution is also evident in the achievements of our students, both academically and in extracurricular activities. Their enthusiasm and dedication continue to inspire us all, demonstrating the vibrant spirit of Nirmala College of Pharmacy.

As we look ahead, let us reaffirm our commitment to excellence, innovation, and service to society. Let us continue to push boundaries, challenge conventions, and strive for excellence in everything we do. Pharmaessence 2024 will continue to serve as a platform to celebrate our successes, share our stories, and inspire future generations of pharmacists.

I extend my heartfelt gratitude to each member of our community for their hard work, dedication, and support. Together, let us build on our achievements and shape a brighter future for Nirmala College of Pharmacy.

Warm regards,

Dr. Badmanabhan R

# Inauguration of First year programmes:

Courses for the Academic year 2023-2024 commenced on October 16th, 2023 with the first year Pharm D and first Semester B.Pharm. Inaugural address was given by Msgr. Francis Keerampara, Protosyncellus. The presidential address was delivered by Rev. Fr. Jose Pullopillil, Administrator and Principal Dr. Badmanaban R welcomed the students and parents and the vice Principal Dr Deepa Jose proposed the vote of thanks.

#### PG Programs:

The M Pharm PG Courses for Departments of Pharmaceutics and Pharmacology for the academic year 2023-2024 commenced on November 14th 2023.











## Graduation Day

The graduation ceremony for Pharm D 2017-2023 batch, B.Pharm 2018-2022 batch and M.Pharm 2020-2022 was held on 12th October 2023. The Principal Dr. Badmanabhan R welcomed the gathering.

Dr. Rajasree R S, Dean, Pharmaceutical Sciences, KUHS formally inaugurated the function and Administrator Rev. Fr. Jose Pulloppillil presided over the function, and Former Administrator Rev. Fr. Jose Mathai Mailadiath delivered the felicitation. Mar. George Punnakottil gold medal for the best outgoing student in academics in B. Pharm course was presented to Ms. Maria C George and Mar George Madathikandathil gold medal for the best outgoing student in Pharm D was presented to Dr. Janice Jacson, Mandumpala.

The occasion was graced by former Administrator Rev. Fr. Jose Mathai Mailadiath who congratulated the proud graduates. Vice Principal Dr. Deepa Jose led the graduates to pledge the Pharmacist's oath. The College newsletter Pharma Essence-2023 8th Edition was also officially released on this occasion at the hands of the Chief Guest Dr. Sunny Eapen. Dr. Suja Abraham, HOD, Department of Pharmacy Practice proposed the vote of thanks.



# Comprehensive Health Check-Up: Invest in Your Well-Being



Prof. Dr Badmanabhan R

In today's fast-paced world, maintaining good health is crucial yet often overlooked until issues arise. A comprehensive health check-up offers a proactive approach to understanding your health status, allowing early detection of potential problems. A whole-body check-up covers a broad range of essential tests and consultations, providing a detailed overview of your overall health. Here is what is included:

#### **Eye Health Check**

 Auto Refractor: Evaluates your eyes' focusing ability, helping to detect refractive errors like myopia, hyperopia, and astigmatism. Early detection can prevent long-term vision issues.

#### **Blood and Serum Tests**

- **Bicarbonate Serum:** Measures bicarbonate levels in your blood to maintain your body's pH balance.
- Blood Glucose (FBS & PPBS): Monitors fasting and postprandial blood glucose levels, crucial for detecting and managing diabetes.
- C reactive protein (Quantitative): Indicates inflammation, helping to detect infections and chronic inflammatory diseases.
- Calcium Serum: Essential for bone health, nerve function, and muscle contraction, this test detects calcium imbalances.
- Cholesterol HDL Ratio: Assesses your risk for cardiovascular diseases by evaluating the balance between good (HDL) and bad (LDL) cholesterol.
- Creatinine Serum: Indicates kidney function; abnormal levels may suggest kidney issues or other health concerns.
- HBA1C (Glycated Hemoglobin Test): Provides a threemonth average of blood glucose levels, offering a broader view of glucose control.
- Lipid Profile: Assesses your risk for heart disease by measuring various fats in your blood.
- Liver Function Tests (LFTs): Measures liver enzymes and bilirubin to assess liver health, detecting conditions like hepatitis or fatty liver.
- Phosphorous Serum: Checks phosphorus levels, crucial for bone health and energy production.
- Potassium & Sodium Serum: These electrolytes are vital for nerve function, muscle contractions, and maintaining fluid balance.
- Thyroid Function Test: Assesses thyroid function, detecting conditions like hypothyroidism or hyperthyroidism.
- Urea Blood & Uric Acid Serum: Evaluates kidney function and helps diagnose conditions like gout or kidney stones.
- Blood Grouping and RH Typing: Knowing your blood type is important for transfusions and understanding your risk conditions.

#### Cardiac Health

• **ECG (Electrocardiogram):** Records the heart's electrical activity, detecting arrhythmias, heart attacks, and other heart conditions.

- Echo Doppler Studies: Uses ultrasound to create images of the heart, assessing its structure and function.
- **Treadmill Test (TMT):** Evaluates your heart's response to physical stress, helping to detect coronary artery disease.

#### **Routine Tests**

- Blood Routine (HB, TC, DC and ESR): A complete blood count provides insights into overall health, detecting conditions like anemia and infections.
- **PCV (Packed Cell Volume):** Measures the proportion of red blood cells, aiding in diagnosing anemia and dehydration.
- **Platelet Count & RBC Count:** These tests evaluate your blood's ability to clot and transport oxygen.
- Stool Routine: Detects digestive disorders and infections by analyzing your stool for parasites and bacteria.
- **Urine Routine (Sugar, Albumin):** Reveals kidney problems, urinary tract infections, and other conditions.

#### **Specialized Tests**

- HBS AG (Australian Antigen) Rapid: Detects hepatitis B surface antigen, indicating hepatitis B infection.
- Blood Picture / Peripheral Smear: Microscopic examination of blood cells helps diagnose various blood disorders.
- Pap smear for Women & PSA for Men: Women undergo a Pap smear to screen for cervical cancer, while men have a PSA test to screen for prostate cancer.

#### **Imaging and Additional Services**

- Abdomen & Pelvis Ultrasound: Evaluates organs in the abdomen and pelvis, detecting conditions like liver disease and ovarian cysts.
- Chest PA (Posteroanterior) X-ray: Detects lung conditions such as pneumonia, tuberculosis, and lung cancer.
- **Mammogram for Women:** Included to screen for breast cancer, offering early detection and peace of mind.

#### Why a Comprehensive Check-Up Is Essential

A comprehensive health check-up is not just a series of tests; it is an investment in your long-term well-being. Early detection of potential health issues often makes them easier to treat. The detailed insights provided by this check-up enable you to make informed decisions about your health, whether adjusting your diet, starting a new exercise routine, or pursuing medical treatment.

#### **Conclusion**

This health evaluation covers all major aspects of your well-being, from heart health to routine blood tests and specialized screenings. Regular check-ups are a proactive step toward a healthier, longer life. Take control of your health today and schedule your comprehensive whole-body check-up.



#### FACULTY AND STUDENT CONTRIBUTIONS

The field of pharmaceutical research is continually evolving, driven by advancements in technology, biology, and chemistry. These innovations not only enhance our understanding of diseases but also lead to the development of new therapies that improve patient outcomes. In this article, we will explore some of the most recent and exciting advances in pharmaceutical research that are transforming healthcare.

#### mRNA Technology: Beyond COVID-19 Vaccines

The success of mRNA vaccines in combating COVID-19 has opened new avenues for mRNA technology. Researchers are now exploring its potential in treating other infectious diseases, cancer, and genetic disorders. By using mRNA to instruct cells to produce specific proteins, scientists can develop personalized therapies that target a wide range of conditions.

#### **CRISPR** and Gene Editing

Clustered Regularly Interspaced Short Palindromic Repeats, which are the hallmark of a bacterial defense system forms the basis for CRISPR-Cas9 genome editing technology. CRISPR-Cas9 technology has revolutionized genetic research, enabling precise editing of DNA. Recent advances have improved the accuracy and efficiency of CRISPR, making it a promising tool for treating genetic diseases such as cystic fibrosis, sickle cell anemia, and muscular dystrophy. Clinical trials are underway to assess the safety and efficacy of CRISPR-based therapies in humans

#### Regenerative Medicine and Stem Cell Therapy

Regenerative medicine aims to repair or replace damaged tissues and organs using stem cells, tissue engineering, and other techniques. Recent breakthroughs include the development of lab-grown organs, stem cell therapies for conditions like spinal cord injuries and heart disease, and the use of 3D bioprinting to create tissue constructs. These advances hold the potential to revolutionize the treatment of many chronic and debilitating conditions.

#### **Biosimilars and Biologics**

Biologics, which are complex drugs made from living organisms, have transformed the treatment of diseases such as rheumatoid arthritis, multiple sclerosis, and various cancers. The development of biosimilars—highly similar versions of biologic drugs—has made these treatments more accessible and affordable. Ongoing research is focused on improving the production and efficacy of biologics and biosimilars.

#### Immunotherapy Advances

Immunotherapy harnesses the body's immune system to fight diseases, particularly cancer. Recent advances include the development of immune checkpoint inhibitors, CAR-T cell therapy, and cancer vaccines. These therapies have shown remarkable success in treating certain types of cancer and are being explored for other diseases, including autoimmune disorders and infectious diseases.

# Latest Advances in Pharmaceutical Research: Pioneering Innovations for Better Health

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Prof. Dr. Deepa Jose Vice- Principal, Professor and HOD, Department of Pharmaceutical Chemistry

#### AI and Machine Learning in Drug Discovery

Artificial intelligence (AI) and machine learning are transforming the drug discovery process by analyzing vast datasets to identify potential drug candidates more quickly and accurately. These technologies help predict how drugs will interact with targets, optimize drug design, and identify biomarkers for disease. AI-driven platforms are accelerating the discovery of new treatments and reducing the time and cost associated with drug development.

#### Nanomedicine: Precision Drug Delivery

Nanotechnology is being used to develop novel drug delivery systems that enhance the efficacy and safety of therapies. Nanoparticles can be engineered to deliver drugs directly to specific cells or tissues, reducing side effects and improving therapeutic outcomes. Advances in nanomedicine include targeted cancer therapies, improved delivery of vaccines, and treatments for neurological disorders.

#### Personalized Medicine

The shift towards personalized medicine is driven by advances in genomics and biomarker research. By tailoring treatments to an individual's genetic profile, healthcare providers can offer more effective and targeted therapies. Personalized medicine is making significant strides in oncology, where treatments are customized based on the genetic mutations of a patient's tumor, leading to better responses and fewer side effects.

#### Microbiome Research

The human microbiome—the collection of microorganisms living in and on our bodies—plays a crucial role in health and disease. Research into the microbiome has led to new insights into conditions such as inflammatory bowel disease, obesity, and mental health disorders. Therapeutic approaches targeting the microbiome, including probiotics, prebiotics, and fecal microbiota transplantation, are being developed to restore balance and treat various conditions.

#### 3D Printing of Pharmaceuticals

3D printing technology is being applied to the manufacturing of pharmaceuticals, allowing for the creation of customized drug dosages and formulations. This technology enables the production of personalized medicine, multi-drug combinations in a single pill, and on-demand manufacturing. 3D printing holds the promise of making medication more accessible and tailored to individual patient needs.

#### Conclusion

The latest advances in pharmaceutical research are driving significant improvements in the prevention, diagnosis, and treatment of diseases. From cutting-edge technologies like CRISPR and AI to innovative drug delivery systems and personalized medicine, these developments are shaping the future of healthcare. As research continues to progress, we can expect even more groundbreaking therapies that will enhance patient care and improve health outcomes worldwide.

#### FACULTY AND STUDENT CONTRIBUTIONS



Mrs. Antriya Annie Tom Associate Professor Dept. of Pharmacy Practice



**Angeline Jaimon Augustine** Vth Pharm D

# Understanding disproportionality analysis in pharmacovigilance

Pharmacovigilance is a crucial scientific discipline focused on ensuring the safety and efficacy of medications throughout their lifecycle. It encompasses the detection, assessment, understanding, and prevention of adverse effects or any other drug-related problems. By monitoring and evaluating drug safety, pharmacovigilance aims to protect public health and enhance patient care.

Disproportionality analysis is a statistical method employed to identify and quantify the over- or under-representation of certain events or characteristics within a dataset compared to a reference distribution. This method is widely utilized in various fields, including pharmacovigilance, social sciences, and criminology, to detect patterns indicating potential issues or areas of concern.

#### Key Concepts in Disproportionality Analysis

#### **Observed and Expected Frequencies**

Observed Frequency: The actual count or proportion of events in the dataset.

Expected Frequency: The count or proportion expected based on a reference population or a baseline rate, calculated using probabilities or proportions from the reference distribution.

Disproportionality Measures:

Several measures are used to compare observed and expected frequencies:

Relative Risk (RR): The ratio of the observed probability to the expected probability.

Odds Ratio (OR): The ratio of the odds of an event occurring in one group to the odds of it occurring in another group.

Proportional Reporting Ratio (PRR): Commonly used in pharmacovigilance, it measures the proportion of reports for a specific event relative to all reports compared to the proportion in a reference set.

#### **Statistical Tests:**

To support disproportionality analysis, various statistical tests are employed:

**Chi-Square Test:** Tests for independence between categorical variables.

**Fisher's Exact Test:** Applied when sample sizes are small or the data is sparse.

**Z-score:** Measures the number of standard deviations an observation is from the mean of the reference distribution.

#### Conducting a Disproportionality Analysis:

The steps involved in conducting a disproportionality analysis are:

1. Define the Population and Reference: Identify the population or dataset of interest and the reference distribution or baseline rates for comparison.

- Calculate Observed and Expected Frequencies: Determine the actual frequencies of the events of interest and calculate the expected frequencies based on the reference distribution.
- 3. Apply Disproportionality Measures: Use appropriate measures to compare the observed and expected frequencies.
- 4. Interpret Results: Assess whether the observed frequencies are significantly higher or lower than expected, and determine if the findings indicate potential areas of concern or require further investigation.

#### **Applications of Disproportionality Analysis**

- 1. In pharmacovigilance, disproportionality analysis is essential for identifying signals of adverse drug reactions (ADRs). By comparing the observed reports of adverse events with the expected number based on overall reporting rates, it helps detect potential safety issues with medications.
- Disproportionality analysis is also applied in social sciences to identify disparities in outcomes across different demographic groups, such as examining racial disproportionality in arrest rates. In healthcare, it helps analyze the distribution of diseases or health outcomes across different populations, identifying potential inequalities and guiding public health interventions.
- 3. Tools and Systems for Disproportionality Analysis

#### FDA Adverse Event Reporting System (FAERS)

The FDA Adverse Event Reporting System (FAERS) is a database maintained by the US Food and Drug Administration (FDA) that collects and stores information on adverse events related to drugs and medical devices. Established in 1969, FAERS is essential for pharmacovigilance, signal detection, risk management, and postmarketing surveillance. It contains over 13 million reports of adverse events and medication errors, allowing the FDA to monitor the safety and effectiveness of these products after approval.

#### Open Vigil FDA

Open Vigil FDA is a pharmacovigilance tool used to query the FDA drug-event database for adverse drug events. It operates on cleaned FDA data by removing duplicates or reports with missing data and uses the open FDA API for accessing the database. Open Vigil FDA provides user-friendly interfaces, powerful algorithms, and configurable output formats, enabling users to check adverse events against a medication list, select the best drug for individual patients, and detect and avoid drug-drug interactions.

#### Conclusion

Disproportionality analysis is a powerful method for identifying potential adverse reactions and disparities across various fields. In pharmacovigilance, it plays a vital role in ensuring drug safety and efficacy, guiding regulatory actions, and protecting public health. By leveraging tools like FAERS and OpenVigil FDA, researchers and healthcare professionals can conduct comprehensive analyses and make informed decisions to enhance patient care and safety.

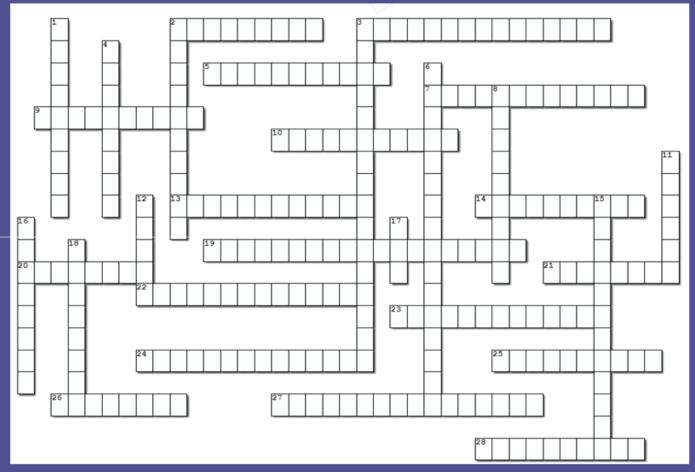
04-05

PHARMAESSENCE Newsletter

## CROSSWORD PUZZLES







- 1. The precursor of melatonin
- 7. The Protective tissue of the brain and spinal cord
- 8. A prodrug of dopamine
- $10. \quad \mbox{A medical condition referring to the formation of a tumor on the adrenal gland }$
- 11. An eicosanoid that is responsible for causing pain
- 13. A common chemical test used to detect adulteration of oils
- $\begin{array}{ll} \hbox{14.} & A \, \hbox{food drug interation between MAO-inhibitors and} \\ & \hbox{tyramine containing food} \end{array}$
- 15. The first chemical compound that was used as a general anesthetic
- 19. Antidote for Benzodiazepine poisoning.
- 21. The cells that are responsible for the secretion of -epinephrine.
- 22. The part of the body that does not have blood supply.
- 23. A beta-blocker used as a prophylatic treatment for migrane
- 25. A crude drug that has anti-hypertensive property
- 26. A natural analgesic present in the body
- 27. The active form of vitamin D
- 28. The biological source of a bacteriological medium...
- 29. The receptors that are responsible for the detection of pain in the body



- 2. The deficiency of this hormone causes Parkinson's disease
- 3. Medical term that is used to describe excess sweating
- 4. A syndrome caused by the use of aspirin
- 5. A condition where a thombus is formed in the deep veins
- 6. A drug that is given as the antidote for Belladona poisoning
- 9. Blood filled venous sinuses that are present in the spleen
- 12. An antodote for opioid poisoning
- 16. A drug that helps to induce the closure of ductus arteriosus
- 17. Area of the brain that produces the 'happy hormone'.
- 18. The genus of the protozoa that causes malaria
- $20. \quad \text{The major excitatory hormone in the brain} \\$
- A tissue antigen present as a part of the immune system.



Some answers contain multiple words. A box is left blank as a gap after each word.



#### 06-07

#### NOBLE THOMAS

(2nd SEM. B. PHARM)

STUDENT ACHIEVEMENTS



Achieved first prize in versification at KUHS central zone arts fest (2023)

#### ANJANA ANTONY (4th SEM. B. PHARM)



Achieved third prize in essay writing – Malayalam at KUHS central zone arts fest (2023)

#### VARSHA V CHANDRA (7th SEM. B. PHARM)



Achieved third prize in ghazal at KUHS central zone arts fest (2023)

## CAMILA A CARLMAN (PHARM. D INTERN)



Achieved first prize in poster presentation at CP CONCLAVE (2023) by Amrita Vishwa Vidyapeetham

#### ABOOBAKKAR SIDHIK SANIL (4th YEAR PHARM. D)



Got selected to KUHS University Football team Camp 2023-2024 on 18th December 2023.

#### JEEVAN JOSEPH (4th YEAR PHARM. D)



Awarded as best goal keeper at All Kerala Inter-Pharmacy Tournament

#### SREELAKSHMI SREEKUMAR (5th YEAR PHARM. D)



Got selected to district level debate competition block level conducted by Federal Bank Speak for India Kerala Edition (2024)

#### AMY THANKACHAN (5th YEAR PHARM. D)



Achieved second prize in National Level E-Quiz competition (Rx quiz quest 2024 by Nirmala College of Pharmacy)

#### FATHIMA IMANI (6th SEM. B. PHARM)



Achieved first prize in All Kerala Intercollegiate RJ competiton conducted by ST Theresa's College, Ernakulam.

#### KRISHNA DAS (3rd YEAR PHARM. D)



Achieved second prize in E-Poster presentation at international conference-Hincon 2024

#### FACULTY ACHIEVEMENTS PhD HOLDERS



Dr. Flowerlet Mathew Completed Doctor of Philosophy from Vellore Institute of Technology (VIT), Vellore, T.N



Dr. Manu Jose Doctor of Philosophy in Pharmaceutical Sciences from JJT University, Rajasthan



Dr. Jobin Kunjumon Vilapurathu Doctor of Philosophy in Pharmaceutical Sciences from Vinayaka Missions Research Foundation (DU), Salem



Dr. Nancy Jose Doctor of Philosophy in Pharmaceutical Sciences from JJT University, Rajasthan



Dr. Anu Jayamol Mathew Doctor of Philosophy in Pharmaceutical Sciences from Shri JJT University Rajasthan



Mrs. Maneesha Peter, Assistant Professor, Dept of Pharmacology bagged the Best Performer Award (2<sup>nd</sup> prize) at the 2 day workshop on Molecular Docking, Dynamics and Network Pharmacology using Open Source Software at Amrita School of Pharmacy on August 23<sup>rd</sup> & 24<sup>th</sup> 2024.

### FACULTY INTERACTION WITH THE OUTSIDE WORL

- Checklist for a successful career' organized by Indian Pharmaceutical Association at Chemists College of Pharmaceutical Sciences, Varikoli, Ernakulam on 20/08/2023.
- "Incubation opportunities students and faculty, early stage entrepreneurs" at St. James College of Pharmacy, Chalakudy on 22/08/2023.
- Panel Discussion on "National Education Policy-Way Forward"



Dr. Fels Saiu

organized by Indian Pharmaceutical Association, Kerala State Branch on 09/09/2023.

Panel Discussion on "Academy Industry Interactions for Empowerment"

- organized by Indian Pharmaceutical Association, Kerala State Branch on 25/09/2023. "Understanding startup ecosystem" organised by St. Joseph's College of Pharmacy, Cherthala on
- "Introduction to Startups" organized by Dale View College of Pharmacy and Research Centre, Thiruvananthapuram on 30/05/2024.

Prof. Dr. Badmanabhan R.

Conducted a 'HPTLC training session' to the R& D scientists at Arjuna Naturals Pvt Ltd Kerala (delegated by Labchrome Scientific Limited LLP)



Dr. Antriya Annie Tom

- Participated as resource person for webinar on "Prescription Audit" organized by the Hospital Pharmacy Practice Forum of the Indian Pharmaceutical Association, Kerala State Branch, on 9th June 2024.
- Seminar on "Pharmacovigilance and ADR Reporting by the pharmacist" organised by Indian Pharmaceutical Association and Lisie College of Pharmacy on 23 July 2023.
- Community Outreach Campaign "Safe and Proper Use Of Medicine" organised by Kerala State Private Pharmacists organised by Aushadha Association Saksharatha Paravoor Block Panchayat and IPA on 29th July 2023.
- Talk on Pharmacovigilance organized by Indian Pharmacist Association, Ernakulam Jilla Committee on Sept 25th 2023 as part of Pharmacist Day Celebrations.



15/02/2024.

Dr Suja Abraham

Clinical International Pharmacy Conclave (CP Conclave) organized by Amrita School of Pharmacy in Collaboration with the Federation of Clinical Pharmacists in India (FCPI) on 15th and 16th Nov 2023.

National Seminar Enhancing Patient Safety by St. Joseph's College of Pharmacy, Cherthala on 10th Oct 2023.



Dr. Dhanish Joseph

Resource person at Al-Azhar College of Pharmacy, Thodupuzha on "Preparation for NAAC accreditation Process"



Dr. Merrin Xavier

Conducted an awareness talk on "Join pharmacist to ensure patient safety' held at Nirmala College of Nursing, Muvattupuzha on 24/11/2023.







# **N/L/4** 2023/

The National Level Conference on Nano-based Drug Delivery Systems, themed "Recent Developments and Future Prospects," was held on 7th October 2023. The conference aimed to explore the latest advancements in nanotechnology-assisted drug delivery systems, discuss challenges and opportunities in targeting drug delivery, and speculate on future trends in pharmaceuticals. The event witnessed an enthusiastic participation of 261 attendees, comprising students, researchers, academicians, and industry professionals.



#### Session I

**Topic:** Nanotechnology-Assisted Delivery of Chemotherapeutics for Intended Therapeutic Outcome.

The session led by **Dr. Manish Kumar Chourasia** Principal Scientist CSIR Lucknow Dr. Chourasia elucidated the application of nanotechnology in enhancing the delivery of chemotherapeutic agents, emphasizing the importance of precise targeting for desired therapeutic outcomes. His insights shed light on the innovative approaches to optimize drug efficacy while minimizing adverse effects.



#### **Session II**

**Topic:** Targeting Drug Delivery: Challenges and Industrial Perspective

This session was led by **Dr. K. Gow-thamarajan**, Professor and Head, Department of Pharmaceutics, JSS College of Pharmacy, Ooty. He highlighted the complexities involved in translating research findings into scalable and commercially viable drug delivery solutions.



#### Session III

**Topic:** Pharmaceutical of Tomorrow: Future Trends and Predictions

The session was elucidated by Dr. Karri VVS Narayana Reddy, Assistant Professor, Department of Pharmaceutics, JSS College of Pharmacy, Ooty .He presented an intriguing outlook on the future trends and predictions in the pharmaceutical industry, particularly focusing on the integration of emerging technologies and innovative approaches. The conference provided a platform for students and faculty members from various colleges to showcase their research works through poster presentations. This interactive session facilitated knowledge exchange and networking opportunities among participants. The event served as a catalyst for advancing research and innovation in nanotechnology-assisted drug delivery systems, promising significant strides towards improving healthcare outcomes.















# MAAAC EER TEAM VISIT













The NAAC Peer Team visited Nirmala College of f I Pharmacy Campus from 29/4/24 to 30/4/24 for the assessment of all the Qualitative Metrics of Self Study Report submitted in the month of January, 2023. The peer team consisted of Dr. Abhijit Joshi, Vice-Chancellor, Desh Bhagat University, Punjab as Chairperson, Dr. Marakanam Srinivasan Umashankar, Professor SRM College of Pharmacy, SRM Institute of Science and Technology, Tamil Nadu-As Member Coordinator and Dr. Sri Nataraj Kalakonda, Principal, Shri Vishnu College of Pharmacy, Andhra Pradesh as member. They were received by The Principal, IQAC Coordinator Dr. Dhanish Joseph, and members of the management, staff, and students of the college. The inspection comprised a campus tour, inspection of facilities, interaction with students, faculty, alumni, and parents, and enthralling cultural performance by the students.

On the basis of the report of the NAAC Peer Team duly approved by the Standing Committee constituted by the NAAC Executive Committee, Nirmala College of Pharmacy Muvattupuzha has been accredited with A+Grade by the National Assessment and Accreditation Council (NAAC) valid for a period of five years with effect from 12 - 07 – 2024.





- The details of the first cycle of accreditations are as below:
- SSR was submitted successfully to NAAC on 18/1/2024.
- Response to DVV clarifications as received on 01/02/24 was submitted successfully to NAAC on 15/02/24.
- SSR was approved by NAAC on 07/03/24.
- Peer Team Visit was held from 29/4/24 to 30/4/24 for First cycle of Accreditation
- Result announced on 12/07/24.

National Assessment and Accreditation Council (NAAC) has accredited Nirmala College of Pharmacy, Muvattupuzha with NAAC 'A+', Grade 3.37. The recognition makes Nirmala College of Pharmacy, Muvattupuzha the only private pharmacy college in Kerala to be accredited with the most coveted NAAC 'A+' Grade.

Out of 7 Categories and 34 key indicators, Nirmala College of Pharmacy has performed incredibly well with scoring full marks in 14 key indicators that include (Curricular Planning and Implementation, Curriculum

Enrichment, Student Enrollment and Profile, Student-Teacher Ratio, Teaching-Learning Process, Evaluation Process and Reforms, Collaboration, Faculty Empowerment Strategies, Institutional Values and Social Responsibilities, Best Practices, and Institutional Distinctiveness.

NAAC evaluates the institutions based on its standards of quality in terms of their performance related to the educational processes and outcomes, curriculum coverage, teaching-learning processes, faculty, research, infrastructure, learning resources, organization, governance, financial well-being, and student services.

The college management along with staff and students celebrated the victorious NAAC results on 13/08/2024. His ExcellencyMarGeorge Madathikandathil presided over the function Manager, Msgr Dr. Pius Malekandathil, and Principal, Dr Badmanabhan R, delivered felicitations. NAAC coordinator Dr Dhanish Joseph gave an account of the NAAC accreditation journey of Nirmala College of Pharmacy. Vice Principal Dr. Deepa Jose delivered the vote of thanks.

















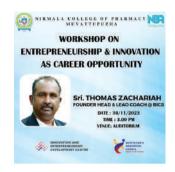


PHARMAESSEN

# INNOVATION AND ENTREPRENEURSHIP

Seminar on "Innovation And Entrepreneurship As Career Opportunity" was held on 30/11/23 led by Mr. Thomas Zachariah "Founder Head and Lead Coach, BICS. The Workshop for IEDC members successfully achieved its objectives of imparting knowledge, fostering an innovation mind set, and providing practical tools for innovation and thinking. A total of 40 students participated in this program.





IEDC



#### FROM AN |INNOVATORS POINT OF VIEW

The session was conducted on 7 /12/23, by Mr. Aghil M Joy ,Production Senior Executive, Megasys Biotek Ltd .It aimed to inspire and educate participants about the journey of an innovator and the essential qualities that define success in the industry.







SHIFT YOUR



The workshop on Design Thinking, Critical Thinking And Innovation Design was conducted on 8/12/2023 and 09/12/2023 by Mr. Manoj Govind, Executive Vice President, CLAP Smart learning Bangalore. It aimed at enhancing participants creative problem solving and transformative mind set. A total of 50 students participated in this program.



## **EVENTS**

# A DESCRIPTION

he workshop on "Problem" I Solving and Ideation "was held on 10/12/2023 in association with Innovation and Entrepreneurship Development Centre led by Sudheer Mr Menon. Senior

# PROBLEM SOLVING AND IDEATION

Entrepreneur and Business Trainer. The session encouraged participants to connect their daily life problems and develop effective solutions. By connecting theory to real-life scenarios and emphasizing the importance of ideation, the workshop was a renewed experience on problem-solving and a toolkit for generating innovative solutions.





Story of Jeeva Milk.



The seminar was conducted on 12/12/2023 by Fr. Jose Moorkathil, Executive Director, f I Jeeva Milk . This session provided valuable insight on the art of entreprenaurship, marketing, product quality standards and its integration with technology.





# WHAT, WHY, HOW

**66** Medication Therapy", a hands on training program was conducted 18/01/2024 by Dr. Jhonson George Professor. Centre .Asst. Medicine Use and Safety , Monash Pharmaceutical Institute of Sciences. A total of 60 students



Management participated in this workshop. The students were briefed about the various concepts involved in medication management.

> The session also included workshop on the concept using suitable learning materials. It involved group activities to analyse and solve the given problems and to derive conclusions from the patient information being presented to them.

#### SHAPING AN ENTREPRENEUR **PERSONALITY**



orkshop on Entrepreneur Skill, Attitude And Behavioural Development was conducted on 28/01/24 by Mr. Nishil Madathil, AGM, Novelty Clothing PVT Ltd. The session served as a catalyst for fostering entrepreneurial spirit and capability among pharmacy students, by instilling confidence, imparting essential skills, and nurturing an entrepreneurial mind set.









# A MIRROR OF YOUR PERSONALITY

Athree day residential camp on personality development "PERSONA" was organised by Indian Pharmaceutical Association, Kerala State in collaboration with Nirmala College of Pharmacy, Muvattupuzha from 10th May – 12th May 2024 at Nest Pastoral centre . The program aspired to equip developing pharmacists to acheive their personal and professional goals and overcome career and life challenges. Over 170 students participated in this programme Spanning over three days, the program was effective in providing an insight into various areas of development like stress management, setting goals and positive image building through various activities and interactive sessions.





















#### \_IV VISITS\_



For II Semster B.Pharm: 100 students were taken to Mane Kanchor Pvt. Ltd., Angamaly accompanied by Dr. Badmanaban R, Mr. Jobin Kunjumon, Ms. Vincy Varghese, Ms. Greeshma G Nair.



For VII Semester B.Pharm - 44 students were taken to Rubber Research Institute of India accompanied by Dr. Badmanaban R, Ms. Lins Mary Joy



For VIII Semester B.Pharm - 45 students were taken to Kwality Pharmaceuticals LTD, Amritsar accompanied by Mr. Jobin Kunjumon V, Ms. Bindhumol P.



IV<sup>th</sup> Pharm. D Students were taken to Manipal Anatomy Museum accompanied by Mr. Reji P S, Mr. Shijo and Ms. Athira

14-15

# WORLD PHARMARIA OVICH WHIK WORLD PHARMARIA OVICH WHIKE





s part of National Pharmacovi-Agilance week (17-23rd September) and World Pharmacist Day (25th September), a debate competition was conducted by the Department of Pharmacy Practice & Literary & Oratory Club, in Association with Indian Association Students Forum on 20/09/2023 at college seminar hall.

#### INTERNATIONAL WOMENS DAY

The women cell organized 1 a food stall competition as part of international womens day celebrations on 7th march 2024. The event showcased culinary talents, cultural diversity in food, and provided a platform for the participants to exhibit their creativity in food preparation and presentation.















# National Pharmacy Week

 ${f T}$ he Pharmacy Practice Department along with 4th Year Pharm D students organized an awareness class on "Rational drug use and medication errors" for nursing students on 24th Nov 2023, Friday at College of Nursing, Nirmala Medical Centre, Muvattupuzha.

#### **WORLD NO TOBACCO DAY**

As part of 'World No Tobacco Day,' SSGP and Co-Curricular committee of Nirmala College of Pharmacy organized an awareness talk on 30/05/2023 by Dr. Mopuri Chaitanya Kumar Reddy, Consultant Surgical Oncologist, Smita Memorial Hospital, Thodupuzha.







#### NATIONAL INNOVATION DAY

As a part of the National Innovation Day (18/10/2023), the Department of Pharmacology in collaboration with the IIC and IECD of the college hosted a lecture on the topic of "Alternatives to Animal Models" for the students of the seventh semester. The lecture was delivered by Dr. T Raja Swaminathan, the Head and Principal Scientist of the Microbiology and Biotechnology Department at the Central Institute of Fisheries, Kochi.



#### National Entrepreneurship Day

National Entrepreneurship Day celebration was conducted on 14/11/2023 and the event was graced by the esteemed presence of Mr. Eldho John Kattoor, CEO, and Co-founder of Geoliv Infrastructure and Realty. The gathering was held to inspire, educate, and celebrate the entrepreneurial spirit, with a particular focus on the pharma sector.







**PHARMAESSENC** 



#### NATIONAL EDUCATION DAY

The National Education
Day celebration was
organised by IEDC and
IIC on 16/11/2023 at the
college seminar hall.

Dr. T M Joseph, Principal of Carmel College Karukadom, was the chief guest of the program.



## National Cleanliness Day celebration



The Nature club organized "Clean the Garden Program" as part of national cleanliness day on January 31, 2024. The event aimed to instill a sense of responsibility and environmental consciousness among the students and staff, fostering a clean and green environment conducive to learning and research.



#### **World Cancer Day**

As part of world cancer day celebration Department of Pharmacy Practice organized an expert talk on 28/02/2024 at auditorium, was led by Dr. Mopuri Chaitanya Kumar Reddy, Consultant Surgical Oncologist, Smita Memorial Hospital, Thodupuzha.

#### **WORLD MUSIC DAY**

The Music Club organized a music event and quiz program on 25th June 2024 as a part of the world music day celebration. Faculty members as well as students performed in the musical event.







#### B-PHARM 2018-22 BATCH





ANUVINDH SURESH



ANEETTA VINOBI



AMALU MATHEW



LITTA ELDHO



NIMMY THOMAS



SNEHA VALSAN

#### PHARM-D 2017-23 BATCH



DR. ALWIN



DR. JANICE



DR. JEFFIN



DR. JOYALIN



DR. LINDA



DR. MARTIN



DR. JOEL



DR. SIMI

**KAPS** Exam Winners



18-19

## EXTRACURRICULAR EVENTS



Freshers day conducted by 2nd PharmD and 3rd Sem B pharm on 1/11/23

## **SPORTS DAY** conducted by sports club















#### CHRISTMAS CELEBRATIONS





## AROHA COLLEGE DAY CELEBRATIO



















#### ONAM CELEBRATIONS





PHARMAESSENCE



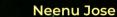
Jimsha Paul

(2011-2013, M. Pharm, Pharmaceutics Batch) Quality Assurance Specialist, LONZA, United Kingdom Lonza.



**Dane Francis** 

(2005-2009 B. Pharm Batch ) Associate Director Pharmacovigilance GSK, Bengaluru (on site) Karnataka, India.





(2006-2010 B. Pharm Batch) Placed in the year 2024 Experienced Scientist, Johnson & Johnson Innovative Medicine

(2011-2015

B. Pharm Batch). Graduated from

Public Health.

University of Chester, UK with a Masters in



**Alan James** 

(2011-2015 B. Pharm Batch) Appointed as Clinical Scientific Expert at Novartis, Dublin Ireland

(2006-2010 B. Pharm Batch)

Aseptic Operations

Limited, Bengaluru

Karnataka, India.

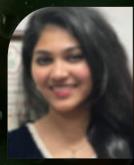
Somerset therapeutic

Manager

Albi Francis



Appu Johny Thalappillil



**Ashlin Jose** 

(2016-2020 B. Pharm Batch) Registered as Pharmacist in United Kingdom.





Ajwin Joseph Martin

2020 - 2022

IOVIA

M. Pharm Batch

(2018-2022 B. Pharm batch) M.S. Medicinal Chemistry National Institute of Pharmaceutical Education and Research Guwahati.



Ms. Soniya Peter



Sr. Swapna Paul

2020 - 2022 M. Pharm Batch Carithas College of Pharmacy

22-23

## TRAVEL GRANT ACHIEVER









**PHARMAESSENCI** 



Mrs. Emily James
Associate Professor



Mrs. Arya V S
Assistant Professor



The Editor's Desk



Maria Rose Joseph 1st Pharm.D



**Christo Tomy** 2nd Sem B.Pharm



Anabel Benny 2nd Pharm.D

#### **COURSES OFFERED**

B.Pharm (Bachelor of Pharmacy-4Yrs)
Pharm.D (Doctor of Pharmacy-6Yrs)
M.Pharm in Pharmaceutics (2Yrs)
M.Pharm in Pharmacology (2Yrs)
M.Pharm in Pharmacy Practice (2Yrs)



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