



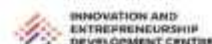
Pharma Almanac

Pharmacy Bulletin



AL SHIFA COLLEGE OF PHARMACY

(Approved by AICTE, PCI, DME, UGC 2(F) & Affiliated to Kerala University of Health Sciences)
Kizhattur, Perinthalmanna. Pin: 679 325



A Biannual Bulletin of
AL SHIFA COLLEGE OF PHARMACY

AL SHIFA COLLEGE OF PHARMACY
An ISO 9001-2008 Certified Institution

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FOREWORD

Another remarkable achievement has been added to the cap of Al Shifa College of Pharmacy. Our institution is proud to bring out a new pharma bulletin, the "Pharma Almanac," which features glimpses and content-rich activities showcasing the vibrant life at our college. Kudos to the editorial board, comprising dedicated women who have organized this bulletin in the most enchanting way. The essence of education lies in sharing knowledge, and we at Al Shifa College of Pharmacy have always been at the forefront of this mission. Through initiatives like this bulletin, we continue to empower others by spreading our knowledge far and wide. At Al Shifa College of Pharmacy, we are dedicated to providing outstanding education and practical training in the pharmacy field. Our institution offers ample opportunities for students to express their literary, creative, artistic, and athletic talents. Our strong interaction with alumni further uplifts our professional activities, ensuring that



our students are well-educated, well-trained, and responsible citizens.

I am confident that our glory will reach greater heights as we continue to share knowledge with audiences across the globe.

Wishing the very best to everyone involved in this endeavor.

Dr. UNNEEN.P
Managing Trustee
Al Shifa College of Pharmacy

It is with great pleasure that I write this foreword for the inaugural issue of our new bulletin, "Pharma Almanac." This bi-annual publication will cover all the key activities of Al Shifa College of Pharmacy, providing a comprehensive overview of our vibrant campus life. In this first issue, you will find detailed reports on the various programs organized by our student clubs, showcasing their continuous efforts and achievements. Additionally, we highlight the accomplishments of our faculty members and feature insightful write-ups from our talented students. A plethora of events and activities further enrich the content, making this newsletter a true reflection of our dynamic community. I extend my heartfelt congratulations to the dedicated editorial board, comprised of the accomplished women editors of Al Shifa College of Pharmacy. My sincere thanks and appreciation goes to Mrs. Bency Baby T, Mrs. Danisha .P, Mrs. Nikhila .T , Dr. Pallavi .P, Mrs. Fathima Sahla .K, and Mrs. Lameesa Banu .V.P for their meticulous planning, editing, and



compilation of articles for this issue. Your hard work and dedication have made this publication possible and set a high standard for future issues. I am confident that "Pharma Almanac" will become an invaluable resource and a milestone for aspiring pharmacy professionals. I hope you find this newsletter informative and enjoyable. Happy reading

Dr Dilip.C
Director , Editorial Board
Al Shifa College of Pharmacy

EDITORIAL

Dear Readers,

Welcome to the inaugural edition of "Pharma Almanac", the official newsletter of Al Shifa College of Pharmacy. This platform serves not only to commemorate our successes but also to foster a sense of unity and pride among our faculty, staff, students, and stakeholders.

Al Shifa College of Pharmacy stands as a dynamic center of learning and innovation. Our dedicated faculty members continually strive to impart knowledge and inspire our students toward new achievements. Through this newsletter, we aim to highlight their exceptional work, celebrate the accomplishments of our students, and keep everyone informed about the latest developments within our institution.

In this debut edition, you will find a diverse array of articles covering a spectrum of topics, including academic achievements, extracurricular activities, faculty spotlights, and scientific insights. We are thrilled to share news of our recent achievement as



Bency Baby I
Editor-in-Chief
Pharma Almanac
Al Shifa College of Pharmacy
Newsletter

the first pharmacy institution to attain the prestigious KUHS QAS A+ accreditation, a testament to our dedicated pursuit of excellence.

We believe effective communication is fundamental to building a connected and strong community. This newsletter is just one of the venues through which we endeavor to facilitate interaction and collaboration within our college. We encourage all members of our community to actively engage with the content, provide feedback, and contribute ideas for future editions.

My sincere thanks go to everyone who has contributed to the creation of this newsletter. I eagerly anticipate its growth and evolution in the editions to come. Together, let us continue to strive for excellence and elevate Al Shifa College of Pharmacy as a beacon of learning and innovation in pharmaceutical education.

Dear Colleagues,

It is with great pleasure that I extend my heartfelt greetings and best wishes to all as we launch the inaugural issue of "Pharma Almanac," Al Shifa College of Pharmacy's new newsletter. This publication marks a significant milestone in the history of our esteemed institution, and I am honoured to be part of this exciting journey.

"Pharma Almanac" aims to be a beacon of knowledge, shedding light on various aspects of pharmaceutical sciences. Our goal is to create a platform that not only informs but also inspires, educates, and engages our readers. We envision this newsletter to be a comprehensive resource, featuring insightful articles, ground breaking research, and updates on the latest advancements in our field.

As we embark on this endeavour, I would like to emphasize the importance of maintaining the highest standards of quality in the content we produce. I urge the editorial team to uphold the principles of accuracy, relevance, and excellence in every article published. Your dedication and hard work are

crucial in making "Pharma Almanac" a distinguished publication, setting it apart as the best pharmacy college newsletter in Kerala.

I am confident that with your collective efforts, "Pharma Almanac" will not only reflect the academic and research prowess of Al Shifa College of Pharmacy but also foster a culture of continuous learning and innovation.

Wishing the editorial team and all contributors' great success in this noble venture. Let us work together to make "Pharma Almanac" a source of pride for our college and a benchmark for others to follow.



With Warm wishes
Dr. Arun Rasheed
Vice Principal (Academics)

Pharma Almanac Pharmacy Bulletin

Dear Students, Faculty, Alumni, and Friends of Al Shifa College of Pharmacy,

We are delighted to present the inaugural edition of "Pharma Almanac", our biannual newsletter. Al Shifa College of Pharmacy has a proud legacy marked by vibrant activities, excellence, collaboration, and innovation for the past couple of decades. This newsletter serves as a new platform to highlight our accomplishments and the dynamic spirit of our community.

"Pharma Almanac" showcases the talent and enthusiasm of our students and aims to align with the latest trends and global challenges in the field of pharmacy. We hope this publication will be an inspiring and informative resource for all.

I extend my heartfelt appreciation to all the members of team Almanac for their dedication and hard work in bringing this newsletter to life.

Thank you for your continued support and engagement.



Warm regards,

Junise V

Vice Principal -Student Affairs

Al Shifa College of Pharmacy

AL SHIFA COLLEGE OF PHARMACY ACHIEVES KUHS QAS A+ STATUS"



Al Shifa College of Pharmacy proudly announces its attainment of the prestigious KUHS QAS A+ status from the Kerala University of Health Sciences (KUHS), marking a significant milestone in pharmaceutical education. It is the first pharmacy institution to achieve this distinction under the KUHS Quality Assurance Standards (QAS). The college received the certificate and memento during a ceremony at the office of Vice

Chancellor Prof. Dr. Mohanan Kunnummal. Dr. Dilip C, the principal, along with Vice Principals Dr. Arun Rasheed and Prof. Junise V, accepted the award. The event was attended by distinguished figures including Pro Vice Chancellor Prof. Dr. Vijayan and Registrar Dr. A.K Manoj Kumar, highlighting the importance of this achievement within the academic community.

"AL SHIFA COLLEGE OF PHARMACY ACHIEVES FIP ACADEMIC INSTITUTIONAL MEMBERSHIP"

Al Shifa College of Pharmacy is thrilled to announce its acceptance into the FIP Academic Institutional Membership (AIM) program. This recognition places us among 180 global schools dedicated to advancing pharmacy education. As part of AIM, Al Shifa gains access to the Global Academic Leaders Forum during the FIP World Congress, discounted registration fees, and international career opportunities. Faculty

engagement with AIM resources, digital events, and specialized programs, such as "Digital Health in Pharmacy," ensures the institution stays at the forefront of education. Collaboration opportunities through AIM working groups further elevate Al Shifa College of Pharmacy's global impact. The institution is excited about the possibilities this membership brings to enhance pharmacy education.

BOARD CERTIFICATION IN PHARMACY SPECIALTIES

Specialization in pharmacy has become increasingly important in today's healthcare landscape. The Board of Pharmacy Specialties (BPS) is at the forefront of advancing the profession by offering certification programs in different specialties to practicing pharmacists. By becoming certified in a specialty area, pharmacists can provide more focused care for their patients and work collaboratively with other healthcare providers to improve patient outcomes. Established in 1976 as an autonomous division of the American Pharmacists Association (AphA), BPS provides 14 distinct specialties and has awarded more than 58,800 active pharmacist certifications so far. These certification programs require a certain amount of practice experience and cover a range of topics related to patient care, public health and pharmacy practice management.

The BPS program offers certification in a variety of pharmacy specialties, including ambulatory care, critical care, infectious disease, pediatrics, cardiology, sterile compounding, geriatrics, nuclear pharmacy, nutrition support, oncology, pharmacotherapy, psychiatry, solid organ transplant, and emergency medicine. To become board-certified in a specialty, pharmacists must meet specific education and experience requirements, pass the examination, and participate in ongoing continuing education.



Author:

Ajmal KarumbaruKuzhiyil
Pharm.D, BCIDP

*Infectious Disease Clinical Pharmacist
SAQR Hospital- Emirates Health Service, UAE*

Key resources for preparing for the exam include journal articles, textbooks or other publications related to the Content Outline. BPS does provide some sample questions on their website and continuing education programs. However, BPS does not provide review information, preparatory courses, or study guides. Such materials are available from outside organizations or professional associations such as American College of Clinical Pharmacy (ACCP), American Pharmacists Association (AphA), American Society of Health-System Pharmacists (ASHP), Pediatric Pharmacy Association, and Society of Infectious Diseases Pharmacists (SIDP), among others.

Candidates can apply for windowed testing for certification and recertification through the BPS website during the examination window (opens twice per year i.e. spring and fall). A continuous testing option is available for certain specialties such as cardiology (BCCP), nuclear pharmacy (BCNP), oncology (BCOP), and psychiatry (BCPP) where the candidate can sit for the exam at any point in the year.

To be eligible for BPS certification, applicants must have a pharmacy degree and pharmacist license and a minimum of three years of experience with at least 50% of time spent in the scope defined by the exam content outline. The experience requirement may vary based on specialty. The examination fee is \$600 and consists of 150 or 175 questions depending on the specialties. Certification validity is seven years, and prerequisite experience statements require attestation from the employed institution enclosed in letterhead. The practice experience stated should be within the seven years following the application.

Annual maintenance fees are \$125 each year from one to six years, and recertification after a period of seven years requires a fee of \$400. The recertification examination consists of 100 or 150 questions depending on the specialties. Continuing education is granted for pharmacists who have earned continuing education credit (100 hours) provided by ACCP and ASHP.

The BPS provides pharmacists with the opportunity to specialize in different streams. Each stream has its own set of requirements and examination domains. The BCPS(Pharmacotherapy) requires three years of practice experience or completion of PGY1 pharmacy residency within the past seven years and covers Patient-Centered Pharmacotherapy, Application of Evidence to Practice and Education, Healthcare Systems, and Population Health. The BCSCP (Sterile compounding) requires 4,000 hours of practice experience and covers Standards, Regulations, and Best Practices, Facilities, Equipment, and Environmental Control, Compounded Sterile Preparations, Patient Care, and Quality Management.

To become a BCOP (Oncology), a pharmacist must have at least four years of practice experience and pass an examination that covers four domains: Oncology Diagnosis and Testing, Therapeutics, Patient Management, and Education, Professional Practice. On the other hand, a BCIDP (Infectious disease) requires the same amount of practice experience and covers domains such as Patient care and Therapeutics, Antimicrobial Stewardship and Practice Management, Education, Public Health, and Translation of Evidence to Practice. Further details about all the 14 specialties are available on the BPS website.

In conclusion, BPS certification in pharmacy specialties is essential for providing more focused care for patients and advancing the pharmacy profession. With a range of specialties available and ongoing continuing education requirements, pharmacists can stay up-to-date with the latest developments in their field and collaborate effectively with other healthcare providers to improve patient outcomes.

The experience can be either job experience or completion of PGY1 residency + 2 years of experience or completion of PGY2 residency in the same discipline.

This information was collected from BPS website (<https://bpsweb.org/>) on 24th August 2023. Please refer to the website for any recent updates.

Reference:

1. BPS website- <https://bpsweb.org/>
2. Certificate and certification programs for clinical excellence: a guide to international pharmacist
Karattuthodi, M. S., Thorakkattil, S. A., Parakkal, S. A., KarumbaruKuzhiyil, A., Subin, A. J., & Thahani. (2021). REVIEW: Certificates and certification programmes for clinical excellence: A guide to international pharmacists. *Pharmacy Education*, 21, p. 845–854. <https://doi.org/10.46542/pe.2021.211.845854>

STUDENT ACHIEVEMENTS

Al Shifa College of Pharmacy Emerges Victorious at Smart India Hackathon (Hardware)-2023

Al Shifa College of Pharmacy shines once again as its team secures the top spot at the Smart India Hackathon (Hardware)-2023 Grand Finale held at Lovely Professional University, Jalandhar, Punjab. Mentored by Dr. Sanal Dev and Mr. Sujith Unnikrishnan, the team, comprising seventh-semester B. Pharm students –Ms. Shameema, Ms. Vinaya Antony, Mr. Mohammed Murshid P, Mr. Mohammed Shameer, Ms. Ajmala, and Mr. Mohammed Jasim - presented an innovative

solution to generate electricity from urine, addressing a challenge set by the Ministry of Jal Shakti, Govt of India. Their outstanding performance earned them a cash prize of 1 lakh and certificates, highlighting the college's commitment to fostering innovation and practical problem-solving skills among its students. The team was greatly supported by, Mr. Unnikrishnan who provided exceptional technical assistance.



INVITING YOUNG ENTREPRENEURS FOR
FACE TO FACE
PROGRAM WITH THE CM
20 FEBRUARY 2024
9.00 AM
KOWDIAM MOU PRINCE CONVENTION CENTER, THIRUVANANTHAPURAM

We are thrilled to announce that **SHAHANA SHERY**, 6th Sem B. Pharm has been selected for an exclusive FACE TO FACE SESSION WITH CHIEF MINISTER OF KERALA.

Congratulations.

FACE TO FACE PROGRAM WITH THE CM

On February 20, 2024, Shahana Shery, 6th semester B.Pharm student of Al Shifa College of Pharmacy, has been selected to participate in an exclusive session with Kerala Chief Minister Pinarayi Vijayan. The event, hosted by Malabar Christian College in Kozhikode, aimed to update students on higher education reforms and seek their suggestions, emphasizing youth involvement in policy making.

AL SHIFA COLLEGE OF PHARMACY WINS ALL KERALA MEDICAL FOOTBALL TOURNAMENT

On March 11, 2024 the team from Al Shifa College of Pharmacy clinched victory at the All Kerala Medical & Paramedical Students' One-day Sevens Football tournament, organized by PMSA College of Paramedical Sciences. In a closely contested final match against Nadakkavil Paramedical College Valanchery, Al Shifa emerged victorious with a remarkable 2-0 win. Congratulations to the winning team for their outstanding achievement in this prestigious tournament.



AL SHIFA COLLEGE OF PHARMACY EXCELS IN DISTRICT ESSAY WRITING CONTEST ORGANIZED BY PAIN AND PALLIATIVE CARE SOCIETY



Hasbiya KV, Shyama S, and Silbiya Jasmine PT from Al Shifa College of Pharmacy showcased their academic prowess by winning top prizes in an essay writing competition organized by the Pain and Palliative Society at the district level. Their insightful essays on pain management and palliative care have earned them recognition and applause.

WORLD HEALTH DAY 2024: NATIONAL E-POSTER COMPETITION

The Department of Pharmacology at Al Shifa College of Pharmacy, Kerala, organized a successful National E-Poster Competition on World Health Day 2024. Held on April 7th, 2024, the competition saw participants from across India showcasing their creativity under the theme 'My Health, My Right'. Winners Kadeeja Thasnim C, Nandhini A S, Aiswarya R, and Hiba Muhammed effectively advocated for health rights through their innovative designs.



INNOVATION SUMMIT 2024 HIGHLIGHTS HEALTHCARE ENTREPRENEURSHIP

The Indian Medical Association organized the Innovation Summit 2024 in Calicut, focusing on entrepreneurial opportunities for doctors and healthcare professionals. The event featured prominent startup founders and owners presenting innovative ideas to angel investors for business support. Key attendees included Senu Sam from My Kare, Dr. Rahul Kumar of Taurean Surgical, Dr. Vineeth Abraham from Baby Memorial Hospital, and P.K. Gopalakrishnan, among others. Two students, Shahana Shery and Abid Hussain from Al Shifa College of Pharmacy, participated as interns, gaining valuable exposure to healthcare entrepreneurship. The summit emphasized the importance of innovative ideas and their commercialization in healthcare, promising further engagement with upcoming events in September. This event was an exceptional opportunity for our students, and they expressed gratitude to the IEDC cell and college management for their support.



APJ ABDUL KALAM RESEARCH AWARDS ANNOUNCED

The APJ Abdul Kalam Research Awards were presented following the E-Poster Presentation competition, held as part of the Annual Students Research Congress at Al Shifa College of Pharmacy on May 30, 2024. Ms. Haleema Shahin from Yenepoya University, Mangalore, won the first prize. The second prize was awarded

to Ms. Fathima Shamila from Al Shifa College of Pharmacy, Perinthamanna. Ms. Namitha C from Amrita School of Pharmacy, Kochi, secured the third prize. The event highlighted the innovative research and academic excellence of pharmacy students from various institutions.





*Our
Toppers*

Congratulation

Toppers Of B Pharm
M Pharm, D Pharm

19th Batch B Pharm
6th semester University Examination

• COLLEGE TOPPERS •



Bagyasree K
75.6 %



Archana R. Raj
75.4 %



Mishriya VP
75.3 %



Shahana Shery
75.3 %



Aswini Hanumanth Vatre
75.2 %

Congratulations

20th Batch B Pharm
4th semester University Examination

• COLLEGE TOPPERS •

Regular



Rilsha TT
80.54 %



Shahana M
79.95 %



Rinsha M M
78.71 %



Muhsina Ahamed
78.28 %

Lateral Entry



Surya U
76.25 %



Sneha C G
75 %



Shameema Sharin, T
73.87 %

Congratulations

M Pharm 3rd Semester
University Examination Result

Pharmaceutics



Pharmaceutical Chemistry



Pharmaceutical Analysis



Pharmacy Practice

Congratulations

D Pharm Part 1 Regular Examination
February -2024
(19th Batch)

• COLLEGE TOPPERS •



Shahala Sibin
81 %



Sana MP
76 %



Nahla N
77.3 %

Congratulations

ACTIVITIES AND EVENTS ORGANIZED BY AL SHIFA COLLEGE OF PHARMACY

A WARM FAREWELL TO PROF (Dr.) T.N.K SURIYAPRAKASH

Al Shifa College of Pharmacy bids a heartfelt farewell to Prof. Dr. T.N.K Suriyaprakash, retiring as Principal after 11 years and 3 months of remarkable leadership. The college community gathered on

January 6, 2024, to honor his journey and express gratitude for his outstanding contributions. The farewell event, attended by management, faculty, staff, students, and well-wishers, paid tribute to Prof. Suriyaprakash dedication and vision.



NATIONAL YOUTH DAY CELEBRATION

On January 15, 2024, the IIC and JCI Nilamboor celebrated National Youth Day at the ACP auditorium. Prof (Dr) Dilip C inaugurated the event, which featured an expert talk on soft skills. With 100 students present, speakers addressed decision-making, interview skills, and time management. The

interactive session engaged the audience, nurturing vital life skills for youth development. The initiative concluded at 4 pm, leaving participants inspired and prepared for success.



SMART INDIA HACKATHON 2023 CHAMPIONS SPEAK

On January 12th, Smart India Hackathons champions speak was conducted at Multipurpose Auditorium, showcasing the winning team's innovative idea from the Smart India Hackathon. Dr. P. Unneen inaugurated the event, attended by Dr. Dilip C, Junise V., Dr. Sanal Dev, and Sujith Unnikrishnan, who honored the talents behind ground breaking initiatives.



BEYOND BOUNDARIES An Upskilling Workshop on Entrepreneurship

On January 24, 2024, Al Shifa College of Pharmacy hosted "Beyond Boundaries," an upskilling workshop on entrepreneurship for 4th Year Pharm.D and M.Pharm. Led by Mrs. Usha R Poommima, the workshop focused on personal and professional growth, addressing topics such as personality development and interview presentation skills.



AL SHIFA COLLEGE HOSTS IIC-SPONSORED LECTURE SERIES ON INNOVATION AND ENTREPRENEURSHIP

On 14 May 2024, the Institutions Innovation Council (IIC) and the Ministry of Education sponsored an Impact Lecture Series at Al Shifa College of Pharmacy, designed to foster innovation and entrepreneurship. The event was inaugurated by Dr. Dilip C, Principal of Al Shifa College of Pharmacy, with Vice Principal Dr. Arun Rasheed and Prof. Junise delivering felicitations. The program featured two sessions: the first by Mr. Ajay Basil Varghese, who inspired students to think creatively and take actionable steps toward executing their ideas. His encouragement led to the students proposing innovative solutions to socially relevant problems. The second session, conducted by Dr. Vimal K.R., focused on his entrepreneurial journey in the pharmacy profession.



BLS TRAINING AT AL SHIFA COLLEGE OF PHARMACY

On May 17th, 2024, at 11 AM, Al Shifa College of Pharmacy held a Basic Life Support (BLS) training organized by Criteria V in the multipurpose auditorium. Prof. Vimal Kumar, Professor and MD of Medicare Pharma, served as the resource person for the event. The training significantly enhanced the emergency preparedness of participants, equipping students and staff with vital life-saving skills. The success of this event underscores the importance of regular BLS training sessions in educational institutions and the broader community.

Basic First Aid Programme



17-05-2024



AL SHIFA COLLEGE OF PHARMACY
Incorporated under the Companies Act, 1956
Al Shifa College of Pharmacy, Al Shifa Group of Institutions, Al Shifa Group of Institutions, Al Shifa Group of Institutions

SEMINAR ON ENTREPRENEURSHIP AND LEGAL/ETHICAL ASPECTS OF STARTUPS

Al Shifa College of Pharmacy recently hosted a seminar on entrepreneurship and startups, inaugurated by Principal Dr. Dilip C, emphasizing the pivotal role of educational institutions in fostering an entrepreneurial spirit. Mrs. Nikhila T, Associate Professor and IIC Vice President, welcomed attendees, stressing the importance of entrepreneurial education and government support. Mr. Vinod PC delivered a keynote address covering MSMEs, Entrepreneurship Development Cells (EDCs), technical support for startups including resources like incubation centers and R&D facilities, and government initiatives such as financial assistance and tax incentives.



AL SHIFA COLLEGE OF PHARMACY HOSTS SUCCESSFUL ROBOTICS WORKSHOP

Al Shifa College of Pharmacy conducted an introductory hands-on workshop titled "Robotics in Pharmacy" on June 13, 2024, at its Seminar Hall. Organized by the Institution's Innovation Council (IIC) and the Innovation and Entrepreneurship Development Center (IEDC), the event drew 30 enthusiastic participants from various courses eager to explore robotics applications in pharmacy. Dr. Sanal Dev delivered the welcome speech, highlighting robotics' relevance in modern pharmaceuticals, followed by an inauguration by Prof. (Dr.) Dilip C emphasizing its transformative potential in healthcare.



ONE-DAY WORKSHOP ON PHARMACY PERSPECTIVES

On March 16, 2024, SSGP and IQAC at Al Shifa College of Pharmacy organized a One-Day Workshop on Pharmacy Perspectives. The event, held recently, featured Mr. Rajesh Thalapatambath, Senior Manager at Meittra Hospital, delivering insightful sessions throughout the day.

The workshop aimed to enrich students' understanding of pharmacy practice, covering topics such as pharmaceutical management, patient care, and the evolving role of pharmacists in healthcare. Mr. Thalapatambath led interactive discussions, case studies, and practical demonstrations, engaging students actively.

The event proved to be an enriching experience, offering students valuable insights into the diverse aspects of their profession.



REPUBLIC DAY CELEBRATION AT CAMPUS



On January 26, 2024, Republic Day was celebrated on campus with a flag hoisting ceremony led by Dr. Preetha S. Panicker at 8 AM at the

B.Pharm block. Faculties and students joined in honoring our nation's heritage.

WORKSHOP ON GAS CHROMATOGRAPHY HELD AT AL SHIFA COLLEGE OF PHARMACY

On March 4, 2024, Al Shifa College of Pharmacy's Pharmaceutical Analysis Department hosted a successful workshop on the application and demonstration of Gas Chromatography (GC). Mr. Vishnu Sharma, Manager at Toswin, provided an expert demonstration of the equipment's details and operational modes to students and faculty. Organized under the guidance of Dr. Prasanth S.S, the workshop highlighted the department's dedication to enriching academic experiences and enhancing practical knowledge.

ONEDAY WORKSHOP APPLICATION DEMONSTRATION OF GC



Organized By: Department of Pharmaceutical Analysis

WORKSHOP ON PHARMACEUTICAL FORMULATION DEVELOPMENT BY DESIGN OF EXPERIMENT

The Department of Pharmaceutics at Al Shifa College of Pharmacy (ACP) hosted a workshop on March 26th, 2024, focusing on pharmaceutical formulation development using Design of Experiment (DOE) techniques. Led by Mr. Shijith KV, the event took place in the Seminar Hall at ACP.

The workshop commenced with a warm welcome from Dr. Preetha S Panicker, followed by an inauguration by Dr. Arun Rasheed, with Prof. Junise V and Dr. Prasanth S.S in attendance. Prof. Dr. Dilip C presented mementos to the resource person and participants. Mrs. Afnan K.V delivered the closing remarks.



SWACHHATA & VOTER AWARENESS PROGRAMME: AL SHIFA COLLEGE OF PHARMACY LEADS CIVIC ENGAGEMENT EFFORTS

Al Shifa College of Pharmacy, in association with the Kerala University of Health Sciences, hosted a three-day Swachhata & Voter Awareness Program from March 29th to 31st, 2024, aiming to foster civic engagement and social responsibility

among youth. The program, inaugurated by Dr. Iqbal V. M and featuring a keynote address by Mr. M.P Jayarajan, emphasized the importance of cleanliness and informed voting.



SUSTAINABILITY DRIVE: AL SHIFA PHARMACY NSS LAUNCHES "SWEEP 2024"

The National Service Scheme (NSS) Unit of Al Shifa College of Pharmacy established waste bins in various parts of the campus to promote sustainability by segregating waste at source and ensuring proper disposal. This activity was performed as part of Safe Waste Elimination & Eradication of Plastic (SWEEP) program 2024.



WORLD ENVIRONMENT DAY CELEBRATION

On June 5, 2024, Al Shifa College of Pharmacy, in collaboration with NSS and UDYAAN Nature Club, celebrated World Environment Day with a sapling plantation drive. The event, inaugurated by Mr. Muhammed Faisal, Manager SIMS, and Mr. Nahas Abdul Razaq, Manager Relations, Training and Placement Cell, commenced with a welcome address by Mr. Jibin Joy. Prof. Dr. Dilip C., Principal, delivered the presidential address, highlighting the importance of trees in maintaining ecological balance.



EMPOWERING EDUCATORS: TEACHER'S TRAINING SESSION AT AL SHIFA COLLEGE OF PHARMACY

Al Shifa College of Pharmacy recently hosted a one-day workshop aimed at empowering its faculty members. Prof. Junise V, Vice Principal, led the comprehensive teacher's training session, focusing on transforming classroom dynamics and enhancing student engagement. The session, inaugurated by Dr. Dilip.C., commenced at 9:15 am and concluded at 3:30 pm, with a total of 32 teaching faculties actively participating. Prof. Junise V provided hands-on training on various active learning techniques, empowering the participants with practical strategies to enhance learning outcomes. The workshop was filled with interactive training activities, fostering a dynamic learning environment for all participants. Prof. Junise V's session proved highly beneficial, offering valuable insights and practical training on active learning techniques. The workshop's impact is expected to positively influence classroom dynamics and student engagement at Al Shifa College of Pharmacy.



PROFESSIONAL CERTIFICATE PROGRAM IN SCIENTIFIC WRITING



Al Shifa College of Pharmacy recently concluded its highly successful Professional Certificate Program in Scientific Writing on May 30, 2024.

This three-day event attracted participants from various colleges across the state, aiming to equip attendees with crucial skills in scientific writing. With an impressive turnout of 60 participants, the program aimed to equip attendees with essential skills and knowledge in scientific writing. Through interactive sessions and discussions, participants explored research methodologies, literature review, data analysis, and effective communication techniques. The program's diverse cohort fostered an environment of learning and collaboration, providing a remarkable experience for all involved. Al Shifa College of Pharmacy's commitment to promoting excellence in education and professional development was evident in the program's resounding success.

"AKSHARAM 2K24"



On May 29, 2024, Al Shifa College of Pharmacy's NSS unit organized a school kit distribution event as part of AKSHARAM 2K24, supporting children of Melattur Pain & Palliative Care patients. Held at the college, 60 school kits were distributed to LP, UP, and High School students. These kits were donated by first-year students from B .Pharm, D. Pharm, and Pharm. D programmes.

TRASH TO TREASURE: A CELEBRATION OF WORLD RECYCLING DAY

Udyaan, the Nature Club of Al Shifa College of Pharmacy, along with the NSS unit, celebrated World Recycling Day with the 'Trash to Treasure' event. The focus was on encouraging students to repurpose college waste into innovative products, showcasing the potential of recycling for a sustainable future. Winners from various semesters showcased their creativity, highlighting the importance of environmental responsibility. The event aimed to inspire young individuals to play a significant role in fostering sustainability through recycling."



NATIONAL E-WORKSHOP ON INTELLECTUAL PROPERTY RIGHTS (IPRS): CURRENT INSIGHTS ON ACADEMICS & RESEARCH



The National E-Workshop on Intellectual Property Rights (IPRs): Current Insights on Academics & Research, was presented by Al Shifa College of Pharmacy, Kerala, in collaboration with CSIR-Institute of Minerals and Materials Technology (IMMT), Odisha, commemorating "World Intellectual Property Day 2024." Dr. T. Pavan Kumar, Senior Scientist in the Department of R&D Planning and Business Development at CSIR-IMMT, Bhubaneswar, served as the resource person for the workshop. The event was held online on 24/04/2024 (Wednesday), from 2 PM onwards, providing an invaluable opportunity to explore the latest trends, challenges, and opportunities surrounding IPRs, tailored specifically for the academic and research community.

PHARM D STUDENTS EMBRACE BIRD WATCHING FOR CONSERVATION AWARENESS

On February 20, 2024, third-year Pharm D students, accompanied by Dr. Prasanth S.S and Professor Junise V, embarked on a bird-watching expedition as part of the GBBC and Campus Bird Count initiative. Departing from the APJ Kalam block at dawn, the group explored the scenic Maniyanerikadavu river armed with binoculars, cameras, and the Kerala Bird Atlas.

The day began with the captivating sight of a black drongo in action, setting the tone for an eventful outing. Indian and palm swiftlets darted across the sky, pausing intermittently above the water. Amidst these sightings, a graceful white-breasted waterhen navigated the river currents with ease. A highlight of the expedition was the rare sighting of a Serpent eagle descending amidst a flock of crows,

showcasing nature's splendor. The unexpected appearance of young cormorants further added to the diversity of avian species observed, including the purple heron, spotted dove, and peafowl. Dr. Prasanth S.S underscored the significance of bird conservation efforts and the role of initiatives like bird atlases in monitoring and preserving ecological balance.



NSS UNIT ORGANIZES 'PARAVAKALKKU PRANAJALAM' EVENT

The National Service Scheme (NSS) unit of Al Shifa College of Pharmacy organized the "Paravakalkku Pranajalam" event on March 7, 2023. The initiative aimed to foster empathy among pharmacy students towards bird welfare by providing water, especially during hot seasons. Mr. Padmaraj, NSS coordinator, welcomed participants, stressing the importance of environmental consciousness. Dr. Prasanth S.S inaugurated the event, emphasizing students' roles in wildlife care. Prof. Junise V, Dr. Arun Rasheed, and Dr. K.P Jaiganesh delivered felicitations. Students actively set up and maintained bird water stations, symbolizing their commitment to environmental sustainability and compassion for wildlife.



AL SHIFA COLLEGE PHARMACY STUDENTS JOIN AMRIT BHARAT STATION SCHEME LAUNCH ON FEBRUARY 26, 2024



Students from Al Shifa College of Pharmacy's Pharm. D and B. Pharm programs enthusiastically took part in the inauguration ceremony for the redevelopment of 554 railway stations under the Amrit Bharat Railway scheme. The event, organized by Indian Railways, began at 10:00 am and was highlighted by an online address from Honorable Prime Minister Sri Narendra Modi at 12:30 pm. The ceremony saw the attendance of esteemed guests, including Shri U.A. Latheef, M.L.A. Manjeri, M.K. Rafeeqa, District Panchayat President, Malappuram, and Shrimathi Jameela Chaliyathodi, Grama Panchayat President, Keezhattur. Prof. Junise V, Mr. Jibin Joy, and Ms. Sreelakshmi S. S were present to support and guide the students throughout the event, making it a noteworthy experience for all involved.

ACP HOSTS VIBRANT FOOD FESTIVAL



On Tuesday, March 5th, 2024, Al Shifa College of Pharmacy (ACP) held a vibrant food festival named "TAKKARAM" organized by students. The event, which featured a variety of culinary delights, was a resounding success. A special stall was reserved for faculty members to showcase their cooking talents, adding a unique touch to the festivities. Academic activities, except for examinations, were cancelled to ensure full participation. The festival fostered camaraderie and showcased the diverse culinary skills within the ACP community, making it a memorable and enjoyable event for all.

RIWAYAT IFTAR MEET 2024: EMBRACING THE SPIRIT OF RAMADAN

Students of B.Pharm (21st Batch), Pharm D (13th Batch), and D.Pharm (19th Batch), in collaboration with the College Union, organized 'Riwayat' - the Iftar Meet to celebrate the essence of Ramadan at Al Shifa College of Pharmacy. The event, attended by over 850 participants including students, faculty, staff, and community members, commenced with an enlightening speech by Bushair Sharqi, followed by a serene Quran recitation. The attendees were treated to a delightful spread of Iftar delicacies, including dates, fruits, appetizers, and beverages, thoughtfully arranged by the organizing committee.



GALATTA 2K24: A THREE-DAY ARTS EXTRAVAGANZA

Galatta 2K24, a vibrant three-day arts extravaganza held from May 13-15, 2024, organized by the Students Union in collaboration with @hazzaki, commenced with an inaugural ceremony graced by Dr. P. Unneen, Managing Trustee of Al Shifa College of Pharmacy. The event was a resounding success, with a colorful array of vibrant programs that made it a memorable experience for all. The dedication and hard work of the faculty, non-teaching staff, and every member of the extended ACP family contributed significantly to the event's success. Special recognition was given to Team Naipunya, Bakkasi, the Student

Union, and all teaching and non-teaching staff for their invaluable contributions. The teachers' dance performances were a highlight, adding joy to the festivities. Additionally, ACP members Prof. Junise V, Mrs. Chandrika M, and Mrs. Nirmala M, who have dedicated 20 years to the institution, were honored for their unwavering commitment. The management's generous moral and financial support played a crucial role in the event's success. The institution cherishes the memories of this wonderful event and looks forward to many more successful endeavors together.



TWO-DAY PHARMACOVIGILANCE WORKSHOP ENHANCES PATIENT SAFETY

The Department of Pharmacy Practice at Al Shifa College of Pharmacy, in collaboration with NCC-PvPI and the Indian Pharmacopoeia Commission, successfully hosted the "Ensuring Patient Safety" pharma covigilance workshop on May 27th and 28th at Kim's Hospital Academic Hall. Dr. Dilip C., Principal of Al Shifa College of Pharmacy, inaugurated the event, with Dr. Jaiprakash from IPC, New Delhi, delivering the keynote address. The workshop covered critical topics such as adverse drug reaction monitoring, vaccine safety surveillance, and practical training on causality assessment. Over 70 students from various colleges participated, benefiting from expert sessions led by Dr. Dilip, Dr. Linu Mohan, Dr. Pallavi, Dr. Sai Keerthana, and Dr. Fathimathu Shadiya. This workshop proved instrumental in advancing the skills and knowledge of future pharmacists in pharma covigilance, marking a significant milestone for patient safety in the pharmacy community.



WORLD NO TOBACCO DAY AWARENESS EVENT AND EXHIBITION HELD AT KIMS AL SHIFA HOSPITAL

On May 31, 2024, the Department of Pharmacy Practice, in collaboration with the Pulmonology Department at KIMS Al Shifa Hospital, organized a significant event commemorating World No Tobacco Day. The event, held at KIMS Al Shifa Hospital, featured an inauguration ceremony with speeches emphasizing the health risks of tobacco

use by Dr. Linu Mohan P and Mr. Priyan KC, CEO of KIMS Al Shifa Hospital. Adv. AK Musthafa, Block Panchayath President, delivered an inspiring address on tobacco's adverse health effects and prevention strategies, followed by felicitations from Dr. Mohammed Yahya, Medical Superintendent, and Satheesh C, General Manager.



WORLD TUBERCULOSIS DAY AWARENESS PROGRAM ORGANIZED BY DEPARTMENT OF PHARMACY PRACTICE

The Department of Pharmacy Practice at Al Shifa College of Pharmacy conducted a comprehensive awareness program on World Tuberculosis Day in collaboration with Government Hospital Perinthalmanna. The event, inaugurated by Dr. Abdul Razak, RMO of Government Hospital Perinthalmanna, aimed to educate and raise awareness about tuberculosis (TB). Mr. Muhsin, TB SHV, played a crucial role in coordinating the event, which included various educational activities. Highlights of the program included a skit portraying key aspects of TB, an informative session on the disease, poster presentations, and

a still model exhibition. A dedicated counseling counter was set up to provide personalized guidance to patients. Faculty and students of Al Shifa College of Pharmacy, alongside Government Hospital Perinthalmanna staff, pledged to actively combat tuberculosis. Dr. Dilip C, Principal of Al Shifa College of Pharmacy, unveiled and distributed informative leaflets detailing TB causes, prevention methods, and distributed masks to attendees. The event underscored Al Shifa College of Pharmacy's commitment to community health and collaborative efforts in tackling public health challenges like tuberculosis.



DEPARTMENT OF PHARMACY PRACTICE HOSTS “ENSURING PATIENT SAFETY” WORKSHOP

The Department of Pharmacy Practice, Al Shifa College of Pharmacy, in collaboration with the National Coordination Centre-Pharmacovigilance Program of India and Indian Pharmacopeial Commission, organized a two-day workshop titled “Ensuring Patient Safety” at KIMS Al Shifa Hospital. The workshop focused on enhancing medication effectiveness and safety. Over 70 students from various colleges across the state participated in sessions conducted by experts including Dr. Dilip, Dr. Linu Mohan, Dr. Pallavi, Dr. Sai Keerthana, and Dr. Fathimathu Shadiya. Topics covered included setting up Adverse Drug Reaction Monitoring Centers, updates on pharmacovigilance in India,

vaccine safety surveillance, practical training in causality assessment, and reporting ADRs using VigiFlow software. The workshop aimed to deepen understanding of pharmacovigilance among pharmacy students, emphasizing its critical role in healthcare safety.



ANNUAL STUDENTS RESEARCH CONGRESS

The Research Management Committee organized the Annual Students Research Congress (ASRC), a prestigious event held on March 31, 2024, to provide a platform for young researchers to showcase their work, engage with peers, and gain insights from esteemed academicians. This year's congress featured keynote address by Dr. Benny K. Abraham, Associate Professor, Department of Molecular and Human Genetics, Baylor College of Medicine S801, One Baylor Plaza, Houston,

TX-77030, USA on the topic "Targeting Mitochondrial Reprogramming of Cancer". The session was moderated by Prof. Paul Jacob, Professor, School of Medical Education, Kottayam. Exploring cutting-edge research through e-poster presentations were the part of the congress as well. Best papers were rewarded with APJ ABDUL KALAM RESEARCH AWARD with cash prizes of Rs. 7500/- (I Prize), Rs. 5000/- (II Prize) and Rs. 3000/- (III Prize). More than two hundred delegates belonging to Pharmacy colleges and outside Kerala participated.



Haleema Shahin of Yenepoya University bagged the first prize, second prize was won by Shamila of Al Shifa College of Pharmacy and Namitha C of Amrita School of Pharmacy, Cochin bagged third prize. Excellent feedback were provided by the delegates mostly insisting more such seminars in future.

FACULTY SPOTLIGHT

IIC REGIONAL MEET AT CUSAT

On January 16, 2023, four faculty members from Al Shifa College of Pharmacy Dr. Sanal Dev, Mrs. Nikhila T, Dr. Pallavi P and Mr. Shafin participated in the IIC Regional Meet at Cochin University of Science and Technology. Mr. Rajeev, Minister for Industries in Kerala, inaugurated the event, emphasizing innovation's role in education. Notable attendees included AICTE officials and IIC representatives.



Dr. SANAL DEV SHARES INSIGHTS AT FACULTY DEVELOPMENT PROGRAM

Dr. Sanal Dev, Professor in the Department of Pharmaceutical Chemistry, served as a distinguished resource person at the One Week Faculty Development Program sponsored by BVDU, Poona College of Pharmacy. Titled "Exploring New Horizons in Drug Design & Development of Novel Drug Candidates for Pharmacy Teachers," the session saw participation from thirty faculty



members from Maharashtra and research scholars. Held on March 18, 2024, from 3:45 PM to 5:00 PM, Dr. Dev's presentation on "Unraveling Selective MAO B Inhibitors through Computational and

Experimental Approaches" captivated the audience. He shared his extensive research experience and insights into MAO B inhibitors, offering valuable perspectives for future advancements in the field.

AL SHIFA COLLEGE OF PHARMACY CONTRIBUTES TO YUVA SAMVAD-INDIA 2047

The vision of India as Viswaguru in 2047 took a step forward as Prof. Junise V, Vice Principal of Al Shifa College of Pharmacy, participated in the organization of YUVA SAMVAD-INDIA 2047. This event, themed "India's Panch Pran - A Youth Dialogue," provided a platform for NSS volunteers to exchange ideas and contribute to the nation's growth. The event holds the potential to increase youth participation and facilitate meaningful discussions on key issues, aligning with India's vision as a global leader in 2047.



MASTERCLASS SERIES: JUNISE V. SHARES EXPERTISE IN "INDUCED DIPOLE"

Prof. Junise V., Vice Principal of Al Shifa College of Pharmacy & Member, Board of Studies, KUHS, recently shared his expertise as a resource person in the February 2024 edition of the "Master Class" series. Organized by the Association of Pharmaceutical Teachers of India (APTI), Kerala State Branch, this dynamic online Continuing Pharmacy Education (CPE) program aims to enhance the knowledge, skills, and professional development of pharmacy faculty members.



JOURNAL CLUB PRESENTATION BY Dr. S. VIMAL KUMAR

The Journal Club of Al Shifa College of Pharmacy organized a presentation on the topic 'Canine Companion: Pawsitively Unforgettable' on January 30, 2024. Dr. S Vimal Kumar, Head of Pharmacology, delivered an engaging keynote shedding light on the therapeutic benefits of the human-canine relationship. Attendees actively participated, sharing personal anecdotes highlighting the significant role of pets in fostering responsibility, empathy, and nurturing relationships."



JOURNAL CLUB PRESENTATION BY Dr. PRASANTH S.S

The Journal Club session on "The Secret Routes of Migratory Birds" held on April 24, 2024, at the Seminar hall of Al Shifa College of Pharmacy, featured Dr. Prasanth SS, the Head of the Department of Pharmaceutical Analysis, as the resource person. Dr. Prasanth discussed various types of bird migration and reasons behind them, advocating for conservation efforts. The session included an interactive bird quiz and highlighted the "Lights Out, Texas!" campaign to protect birds during migration.



Attendees actively engaged in discussions, gaining a deeper appreciation for bird migration and conservation efforts. Dr. Dilip C, Principal, presented Dr. Prasanth SS with a certificate for his presentation, followed by a networking session with light refreshments. The event successfully raised awareness about the significance of bird migration and the need for conservation actions.

JOURNAL CLUB PRESENTATION BY PROF JUNISE V

The Journal Club of Al Shifa College of Pharmacy hosted an enlightening session on "Educating for Success: Integrating WHO Life Skills" on May 28, 2024. Prof. Junise V, Vice Principal, led an engaging discussion on essential life skills, featuring dynamic activities and practical applications. The event



received positive feedback, highlighting its impact on personal and professional development. The session reaffirmed the college's commitment to continuous learning and growth.



DANISHA P. WINS SECOND PRIZE AT WINGS 2024 POSTER COMPETITION

Danisha P, Associate Professor, Al Shifa College of Pharmacy bags second prize in a poster competition at Two day International conference WINGS 2024, held at Westfort College of Pharmacy, Thrissur, Kerala on May 17th.

ENHANCING ACADEMIC EXCELLENCE: PROF. JUNISE V LEADS FACULTY DEVELOPMENT PROGRAM AT KUHS

Prof. Junise V served as a resource person in the three-day Faculty Development Program (FDP) conducted by Kerala University of Health Sciences (KUHS) from May 23, 2024, to May 25, 2024.

organized by the Academic Staff College (ASC) under the leadership of Dr. Sajith Kumar, Director of ASC, and Dr. Rajashree, Dean of Pharmaceutical Sciences



AL SHIFA COLLEGE OF PHARMACY CELEBRATES FACULTY ACHIEVEMENTS IN RESEARCH AND INNOVATION

Al Shifa College of Pharmacy proudly honors several faculty members for their outstanding academic contributions and achievements in research and innovation. These achievements include impactful publications in esteemed peer-reviewed journals, which have earned them recognition and incentives through the Research Management Committee.

Dr. Sanal Dev, Mr. Suhail P.T, Mrs. Bency Baby T, and Mrs. Danisha P have been awarded seed grants to support pioneering independent research projects scheduled for 2024. Mrs. Abeesha Jumana and Mr. Abdul Rasheed have successfully secured patents, demonstrating the College's commitment to advancing

pharmaceutical innovation. Congratulations to all faculty members for their exceptional dedication and contributions to advancing academic research and innovation at Al Shifa College of Pharmacy.



AL SHIFA COLLEGE INNOVATES WITH TUBERCULOSIS NANOPARTICLE PATENT

Al Shifa College of Pharmacy proudly announces the publication of a new patent titled 'Development and evaluation of chitosan nanoparticles based dry powder inhalations for tuberculosis' by Prof. Junise V, Vice Principal, and Ms. AsnaFathima A, Assistant Professor. This patent underscores their dedication to advancing pharmaceutical research, specifically in tuberculosis treatment using innovative nanoparticle technology. The achievement highlights Al Shifa's commitment to fostering cutting-edge research in healthcare.



RESEARCH RENDEZVOUS: PUBLICATION /PATENTS

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CAMPUS PLACEMENT ACTIVITIES RECAP

Lakshya Pharma Talk Series 2024 – Alumnus talks

Exploring Dispensing Pharmacy: First Session of Lakshya Pharma Talk Series 2024

Al Shifa College of Pharmacy launched its Lakshya Pharma Talk Series 2024 with a focused session titled "Exploring Trends and Opportunities in Dispensing Pharmacy," featuring Mohamed Niyas, Managing Partner of Shafi Haji Medicals, as the keynote speaker. Held on March 1, 2024, the session aimed to enrich second-year D Pharm students' understanding of evolving trends in the field.



Charting Your Path: Insights into NIPER Preparation and Opportunities

The second session of Lakshya Pharma Talk Series 2024 at Al Shifa College of Pharmacy (Training and Placement Cell) on March 2, 2024, featured an online seminar titled "Charting Your Path: The Road to NIPER." Muhammad Nizam V.P, an NIPER Hyderabad student and college alumnus, shared insights into competitive exam preparation strategies.



Beyond the Counter: Dr. Fabin's Insights on Career Opportunities in Pharmacy

The third session of Lakshya Pharma Talk Series, titled "Beyond the Counter: Exploring Diverse Career Avenues for Pharmacy Graduates," took place on March 25, 2024, via Google Meet. Hosted simultaneously at Al Shifa College of Pharmacy Auditorium and Kims Al Shifa Hospital, the session featured keynote speaker Dr. Fabin, a clinical pharmacologist from Americares India Foundation

and an Al Shifa College of Pharmacy alumnus. Dr. Fabin shared valuable insights on career guidance, job opportunities, and the use of social media for professional networking in the pharmaceutical industry. The session concluded with an interactive Q&A segment, allowing students to engage with Dr. Fabin and clarify career-related queries.

Alembic Pharmaceuticals Connects with B.Pharm Students: A Successful Online Campus Drive

An online campus drive with Alembic Pharmaceuticals for 8th-semester B.Pharm students, offering placement as Medical Representatives was

organized as a part of campus placement drive. Mr. ParthSaha from Alembic Pharmaceuticals delivered an insightful presentation, enlightening

students about the company's culture and the role of a Medical Representative. Individual interviews were held from 11:30 AM to 2:30 PM. Aswin K, Mohammed Murshid P, Mohammed Jasim, and Abu Rajah KP were selected in the first round. Overall, the campus drive was a success, facilitating positive interactions between students and industry professionals. It provided valuable insights and potential career opportunities, bridging the gap between academia and the pharmaceutical sector and ensuring the students' development.



Campus Drive with Shafi Haji Medicals

An offline campus drive was organized in collaboration with Shafi Haji Medicals for 2nd year D. Pharm students. The event welcomed 21 participants and featured a presentation by Mr. Muhammad Niyas P, managing partner of Shafi Haji Medicals, who discussed the company's goals. This drive bridged the gap between academics and industry opportunities for students.



Udyogah Hosts Successful Multistate Campus Placement Drive

Udyogah, Al Shifa College of Pharmacy's Training & Placement Cell, organized a Campus Placement Drive on April 29, 2024. Candidates from various colleges in Kerala, Tamil Nadu, and Karnataka participated. Mr. Thajudheen P E, HR Manager of Suhail Manpower Consultants, delivered a motivating speech, energizing the atmosphere. The drive offered face-to-face interview sessions, providing students valuable opportunities to showcase their skills. This diverse representation enriched the talent pool and facilitated a vibrant exchange of ideas, enhancing the overall impact of the placement drive.



Career Guidance Programme 'Ignite the Spark' Held at Al Shifa College of Pharmacy

On May 23, 2024, Alshifa College of Pharmacy's Training and Placement Cell-UDYOGAH, in association with SQAC & IQAC, organized a career guidance program titled 'Ignite the Spark.' The session, led by Dr. Hussain Melattur, a JCI National Trainer and International Corporate Trainer, took place in the Multipurpose Auditorium and was attended by 121 students from the 7th and 8th semester B.Pharm and the 3rd and 4th year Pharm D.



SCIENTIFIC INSIGHTS

MOBILE HEALTH APPLICATION- GI CARE



Mrs. NIKHILA T



Dr. PALLAVI P



SHIFNA E.P



SANA N



AJIMY.P.YOOSUF



ANGELA THANKAM
JOHNSON

Authors: Mrs. Nikhila T (Associate Professor, Department of Pharmacy Practice), Dr. Pallavi P (Assistant Professor, Department of Pharmacy Practice), Shifna EP, Sana N, Ajimy P. Yoosuf (Pharm. D Interns, 9th Batch)

The rapid technological progress has significantly transformed healthcare, introducing novel instruments for patient education and care. There has been continuous influx of Health apps that can be used directly by patients for wellness, prevention, and treatment information. While these apps offer benefits in terms of knowledge enhancement, skill development, self-health promotion, communication, and clinical decision-making.

We have developed a novel mobile health application "GI CARE" which is an culmination of dedicated research and innovation. Our app specifically focuses on gastroenterology, providing comprehensive descriptions and animated videos on major diseases such as GERD, IBS, IBD, and liver cirrhosis. [Fig: 1]



Salient features of our application includes:-

1. Dual login system: A unique feature of GI CARE is the inclusion of two logins, one for patients and another for healthcare professionals and medical students. This differentiation reduces the risk of self-medication and ensures that patients receive appropriate guidance from qualified professionals.

2. Descriptive facet: GI CARE has comprehensive details on diseases, drugs and lifestyle modifications. Detailed information on drugs, including brand names, current prices, pharmacology, pharmacokinetics, and monitoring parameters. Disease section provides in-depth information such as definitions, etiology, pathophysiology, signs and symptoms, risk factors, complications, diagnosis, and both pharmacological and non-pharmacological management option. (Fig :2)

3. Animation facet : GI CARE has been uniquely designed with cartoon portrayals with 3D visualisation and audios. It depicts the pathophysiology, signs and symptoms, risk factors, complications and lifestyle modifications. We have also included major diagnostic procedures such as biopsy of liver lesion, Upper GI endoscopy, colonoscopy, CT scan and diagnostic ultrasound thereby reducing the anxiety level of patients.

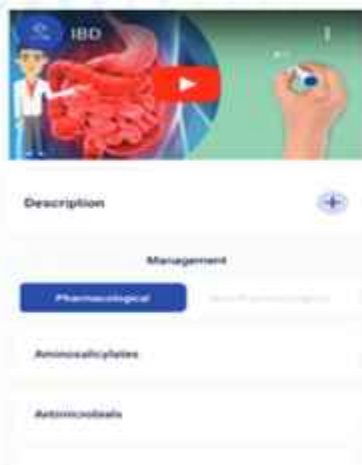


Fig 2: App screen view showing both animated video and descriptive part of IBD

Our GI CARE app is a novel platform for health care professionals, students as well as patients seeking answers. GI CARE app is available at google play store and can be downloaded with the QR Code scan provided below [Fig: 3]. We believe our mobile health app has improved knowledge and decision-making skills among healthcare professionals, students and patients. This mobile health application was developed by Ajimy P Yoosuf, Sana N, Angela Thankam Johnson, and Shifna E.P of 9th batch of PharmD, under the expert guidance of Mrs. Nikhila T and co-guidance of Dr. Pallavi P, Department of Pharmacy practice and Dr. Saju Xavier, Gastroenterology Department at KIMS Al Shifa Hospital.



Fig 3: QR Code scan to download GI- Care app



Fig1: App screen view depicting four diseases

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FDA APPROVES PIVYA (PIVMECILLINAM) TABLETS FOR TREATING UNCOMPLICATED UTI'S IN WOMEN

Authors: Amulya Diya MR,(Pharm.D Intern), Angela Thankam Johnson (Pharm. D Intern),
Sradha (Pharm.D Intern) Al Shifa College Of Pharmacy



AMULYA DIYA M R



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SRADHA

Uncomplicated urinary tract infections (UTI's) are bacterial infections of the bladder in females who have no structural abnormalities in their urinary tract. Around half of all women will experience at least one UTI's in their lifetime. UTI's are the most frequent bacterial infections encountered in outpatient care.

Acute cystitis and pyelonephritis episodes in healthy, premenopausal, non-pregnant women without any history indicating an abnormal urinary tract are typically considered uncomplicated. In contrast, other cases are deemed complicated. This classification has traditionally guided the selection and duration of antimicrobial treatments, with broader-spectrum antibiotics and longer treatment courses often recommended for complicated UTI's. However, this approach does not reflect the complexity of complicated UTI's syndromes and often misclassifies many infections that could be effectively treated with short-course regimens.

The U.S. Food and Drug Administration (FDA) has recently given its approval for Pivya (pivmecillinam) tablets for the treatment of uncomplicated urinary tract infections (UTI's) in adult females. This approval comes as a significant development in combating common bacterial infections affecting millions of women each year.

Pivya, is indicated for the treatment of UTI's caused by susceptible isolates of *Escherichia coli*, *Proteus mirabilis*, and *Staphylococcus saprophyticus*. The drug belongs to the penicillin antibiotic class and is administered orally, making it a convenient option

for patients. Pivmecillinam is a 6 aminopenicillanic acid derivative that is metabolised to the active form of drug, mecillinam. Mecillinam interferes with the bacterial cell wall and has a mode of action different from other penicillins by exerting high specificity against Penicillin Binding Protein 2 in the gram negative cell wall.

UTI's, primarily caused by bacterial pathogens, can lead to discomfort, pain, and potentially serious complications if left untreated. The emergence of antibiotic resistance poses a growing challenge in the management of UTI's, underscoring the importance of new treatment options like Pivya.

Clinical trials supporting the FDA approval demonstrated the efficacy and safety of Pivya in treating females 18 years of age or older with uncomplicated UTI's was assessed in three controlled clinical trials comparing different Pivya dosing regimens to placebo, to another oral antibacterial drug and to ibuprofen (an anti-inflammatory drug). Patients treated with Pivya experienced significant resolution of symptoms and eradication of the infecting pathogens, with a favorable safety profile observed.

As with any antibiotic, healthcare professionals are encouraged to use Pivya judiciously to minimize the risk of antibiotic resistance and adverse effects. Patients should adhere to the prescribed dosage and duration of treatment as directed by their healthcare provider. Pivya is expected to be available by prescription in pharmacies nationwide within the coming weeks, offering a promising option for women suffering from uncomplicated UTI's.

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GEN AI IN PHARMA SECTOR



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Over the last several years, the use of artificial intelligence (AI) in the pharma and biomedical industry has gone from science fiction to science fact. Increasingly, pharma and biotech companies are adopting more efficient, automated processes that incorporate data-driven decisions and use predictive analytics tools.

All the experiments conducted in our lab generates a lot of data, human mind cannot recollect many data points and come to a conclusion, but pharma industry in collaboration with various others companies like Accenture are designing AI Algorithm which can analyse large amount of biological data including genomics, proteomics and metabolomics data and they can use that to identify potential drug targets and develop newer drugs. Second one, Predictive modeling In which AI and machine learning comes together and it is useful to predict the efficiency of a drug moiety based on its side effects and based on its side effect and other properties of the particular drug molecule. AI try to predict the pharmacological effect of the moiety. Molecular structures, simulating drug interactions, an AI can identify existing drugs that could be repurposed for new therapeutic uses, potentially speeding up the drug development process and reducing costs.

The biggest AI tools for drug discovery include

1. Generative AI models in BioNeMo Service. BioNeMo Service features nine AI generative

models covering a wide spectrum of applications for developing AI drug discovery pipelines: AlphaFold 2, ESMFold, and Open Fold for 3D protein structure prediction from a primary amino acid sequence. Alpha Fold is an artificial intelligence (AI) program developed by Deep Mind, a subsidiary of Alphabet, which performs predictions of protein structure. The program is designed as a deep learning system.

2. Deep Chem : An open-source library that provides a wide range of tools and models for drug discovery, including deep learning models for molecular property prediction, virtual screening, and generative chemistry

3. Graph Conv: A deep learning model architecture that operates on molecular graphs. It has been successful in predicting molecular properties, such as bioactivity and toxicity, by leveraging the structural information encoded in the graph representation of molecules.

4. ChemBERTa : A language model specifically designed for drug discovery tasks. It is based on the Transformer architecture and is pretrained on a large corpus of the chemical and biomedical literature, allowing it to generate molecular structures, predict properties, and assist in lead optimization.

5. RDKit: A widely used open-source cheminformatics library that offers various functionalities for molecule handling, substructure searching, and descriptor calculation. It can be integrated with machine learning frameworks for MLDB.

6. MLDB (Extraction of Chemical and Physical Properties from the Literature-Drug Bank) is a database that combines natural language processing and machine learning to extract chemical and biological data from the scientific literature. It provides valuable information for drug discovery applications.

Conclusion:

The integration of artificial intelligence (AI) in the pharmaceutical sector has revolutionized drug discovery and development processes, enabling more efficient analysis of biological data and prediction of drug efficiency. Advanced AI tools like Generative AI models and GraphConv have accelerated drug discovery pipelines and facilitated the repurposing of existing drugs for new therapeutic uses. Collaboration between the pharma industry and technology companies has led to data-driven decision-making processes, resulting in the development of safer medications. Embracing AI technologies in the pharmaceutical sector is expected to drive innovation, reduce costs, and improve patient outcomes in the future.

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ADVERSE DRUG REACTION MONITORING

The International Conference on Harmonization of Technical Requirements for Registration of Pharmaceuticals for Human Use, of which the World Health Organization (WHO) and the United States Food and Drug Administration (FDA) are members, defines an ADR as "A response to a drug which is noxious and unintended, and which occurs at doses normally used for prophylaxis, diagnosis, or therapy of disease or the modification of physiologic function"

What is the importance of ADR monitoring?

Monitoring ADRs is important because ADRs are among the leading cause of many countries. Adverse drug reaction (ADRs) are recognised as a common cause of hospital admissions, and they constitute a significant economic burden for hospitals. Hospital based ADR monitoring and reporting programmes, aim is to identify and quantify the risk associated with the use of drugs provided in a hospital setting. Health care professionals (physicians, pharmacist, nurse, dentist) are best place to report suspected adverse reactions as part of patient care.

Pharmacovigilance

Pharmacovigilance is the science and activities relating to the detection, assessment, understanding and prevention of adverse effect or any other medicine /vaccine related problems. It is also known. It is a key public health function that monitors the safety of medicines and takes actions to reduce the risk and increase the benefits of medicines.

In Public Health Programmes and Regulatory Services". PvPI as a WHO-CC provides scientific support to countries in Asia and beyond for Pharmacovigilance

What does pharmacovigilance programme do in India?

The Pharmacovigilance Programme of India (PvPI) is an Indian government organization which identifies and responds to drug safety problems. Its activities include receiving reports of adverse drug events and taking necessary action to remedy problems.

Pharmacovigilance is based on sound scientific principles and is an integral part of clinical practices. This discipline needs to develop further to meet the demands of public health for which continuous monitoring of drugs is essential. Such monitoring will help in assessing, monitoring and detecting adverse effects of drugs, their interactions, taking

corrective intervention, selection of safer drugs for rational prescribing etc

Recognising the strength and progressive journey of PvPI in the area of Pharmacovigilance and Public health, World Health Organization (WHO) HQ, Geneva on July 18, 2017 has bestowed upon India the honour as the "WHO-Collaborating Centre for Pharmacovigilance".

What to do as a professional to reduce ADRs ?

To minimize the risk of adverse drug events in adults, it is essential to adopt a proactive approach. This includes maintaining a comprehensive list of medications, adhering strictly to prescribed dosages, and actively engaging with healthcare providers by asking pertinent questions. Additionally, it is crucial to stay current with any recommended blood tests as advised by your physician and to strictly adhere to medication instructions. Effective management

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of adverse drug reactions (ADRs) involves early recognition and prompt initiation of appropriate treatment. In severe cases like anaphylaxis, immediate acute therapy should be provided, and the causative drug should be discontinued. Preventing ADRs requires a comprehensive patient assessment, fostering open communication among healthcare professionals, educating patients about potential ADRs, and leveraging electronic health records for enhanced monitoring and management.

In conclusion, ADR monitoring through pharmacovigilance is indispensable for ensuring patient safety and optimizing the benefits of medications. Healthcare professionals, regulatory bodies, and pharmacovigilance programs must work together to enhance ADR reporting, minimise risks, and promote safe medication practices.

FORGING FRONTIERS: THE POWER OF MACROCYCLIC PEPTIDES



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Macrocyclic peptides, with their ring-like structures spanning multiple amino acids, offer unique advantages in drug development. They can be synthesized using various methods and exhibit selective binding to protein surfaces, particularly in protein-protein interactions. Advances in screening and design techniques have led to the discovery of biologically active peptides, revealing insights into their interaction mechanisms. Macrocyclization enhances target engagement, making these peptides promising candidates for drug development.

Key Features of Macrocyclic Drugs

A review of 68 macrocyclic drugs shows that half treat infections, mainly bacterial, with some targeting parasites or fungi. Oncology accounts for one in seven, while others treat cardiovascular diseases, gynaecological issues, and prevent transplant rejection. The rest are used in areas like anaesthesiology and pain management. Most macrocyclic drugs belong to two chemical classes: cyclic peptides, which are mainly administered parenterally (except cyclosporin A), and macrolides, with 15 oral and 9 parenteral drugs. A few drugs belong to the ansamycin and porphyrin classes, while the alkaloid, bicyclam, cyclodextrin, and epothilone classes each have one drug. 30 of the macrocyclic

drugs are cyclic peptides, with subclasses like disulfide-bridged cyclic peptides. Apart from cyclosporin A, given orally, they are administered parenterally due to limited oral bioavailability. These drugs are highly polar with many hydrogen bond donors and a large polar surface area.

PeptiDream in Advancing Drug Discovery

The field of constrained peptides is growing rapidly, aided by advancements in synthesis technologies. Platforms like PeptiDream PDPS enable rapid generation and screening of macrocyclic compounds, expediting drug discovery efforts. In

contrast to the lengthy process of traditional high throughput screening (HTS) campaigns for small molecule hits, which can last about a year, PDPS yields potent hits with high target selectivity within 1-2 months. These hits can then be swiftly optimized through peptide chemistry in a few more months, resulting in macrocyclic peptides with highly selective binding affinity in the low-nM to pM range for the desired target. These constrained peptides hold potential as standalone drugs, components of peptide-drug conjugates, or starting points for non-peptidyl drug leads, marking a significant phase in drug discovery and development.

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ANTI MICROBIAL RESISTANCE & CHALLENGES IN PREVENTING HOSPITAL INFECTIONS



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INTRODUCTION

Antimicrobial resistance (AMR) poses a significant and growing threat to global public health, with India facing particularly acute challenges. The misuse and overuse of antibiotics have led to an increase in multi-drug-resistant infections, complicating the treatment of hospital-acquired infections (HAIs). Inadequate infection control practices, limited surveillance, and insufficient healthcare infrastructure further exacerbate the situation. Addressing these challenges requires coordinated efforts across healthcare systems, policy frameworks, and public awareness campaigns to curb the spread of resistant pathogens and enhance infection prevention measures in hospitals.

CURRENT SCENARIO OF ANTIMICROBIAL RESISTANCE IN INDIA

Recent study in 2020 by International agencies like World Health Organisation, European Centre for Disease Control and World Health Assembly resolutions highlighted the high prevalence of healthcare-associated infection (HAI) and antimicrobial resistance (AMR), resulting in increased morbidity and mortality rates among citizens.

The Lancet study found that Hospital Associated Infection (HAI) and AMR are interconnected and observed high levels of both in Indian tertiary hospitals. Infections that one develops while undergoing treatment at a healthcare facility are called HAI, mainly caused due to poor hygiene or infection control practices.

According to the World Health Organisation (WHO) findings, AMR causes an estimated five million (5 million) deaths every year globally, with projections suggesting a rise to 10 million by 2050.

Recent study by lancet reviewed 26 hospitals

in 20 states and union territories that reported bloodstream infection and UTI surveillance data for at least one month to the network between May 1, 2017, and October 31, 2018. Majority of hospitals reviewed (65%) were in the public sector. The high HAI has also resulted in spread of drug-resistant infections within hospital premises and outside communities.

Over-the-counter (OTC) accessibility and limited awareness compound the problem. Overuse and misuse have led to a decline in antibiotic effectiveness, with pharmaceuticals showing reluctance to invest in new antibiotics. Hospitals should take the lead in prescribing accurate antibiotic dosages, preventing cross-patient infections and implementing stewardship for effective management. The misuse of antibiotics leads to bacterial resistance while the pharmaceutical industry's lack of focus on new antibiotics complicates the problem. In India alone reported 100,000 cases of antibiotic-resistant organisms. Patients who consider the internet to

be know it all and do not prefer seeking medical advice, but instead take medicines based on an old prescription or do not complete the full medication course once they start feeling better, become high risk for recurring infections with evolving drug resistance. Although AMR was considered as an urban phenomenon, it has trickled down to the rural areas now. All healthcare professionals are advised to be watchful of marketing tactics used by pharmaceutical companies and not to get swayed to prescribe them for monetary benefits.

CONCLUSION

Combating antimicrobial resistance in India demands urgent and coordinated action across all sectors. Strengthening infection control practices, improving antibiotic stewardship, and enhancing surveillance systems are crucial steps. Continued efforts to raise public awareness and invest in healthcare infrastructure are essential to effectively mitigate the impact of AMR and safeguard public health.

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INDUSTRIAL VISIT

EXPLORING VACCINE PRODUCTION: STUDENTS' INSIGHTFUL VISIT TO PASTEUR INSTITUTE, COONOR

On January 12, 2024, 18 seventh-semester B.Pharm students, accompanied by faculty members Dr. Preetha S Panicker, Mrs. Afnan K, and Ms. Naseena U, undertook an enlightening industrial visit to the Pasteur Institute in Coonoor, Ooty. The visit aimed to familiarize students with the intricacies of vaccine production and Good Manufacturing Practices (GMP). The institute, renowned for its contributions to public health, provided a comprehensive tour of its vaccine production units, emphasizing the production processes of vaccines such as Rabies and DPT. Interactive sessions with institute scientists offered



insights into quality control measures and ongoing research, enriching the students' understanding of pharmaceutical manufacturing standards and fostering their professional development.

ENRICHING INDUSTRIAL VISIT AND CULTURAL EXPEDITION: A VISIT TO INDIAN PHARMACOPOEIA COMMISSION

An industrial visit was organized for students of 5th Pharm.D, 2nd Pharm.D (PB), 3rd Semester M.Pharm (Pharmacy Practice) students from February 03, 2024 to February 12, 2024. The group, comprising 33 students and 2 faculty members, visited the Indian Pharmacopoeia Commission in Ghaziabad, where they gained insights into IPC's activities and were warmly received by

Ms. Manju Singh, Dr. Vivekanandan Kalaiselvan, and Dr. Meenakshi Dahiya. Additionally, the students explored fascinating destinations like Jaisalmer, Manali, Rishikesh, and Agra, making memorable experiences such as desert safaris, snowfalls in Manali, river rafting in Rishikesh, and a visit to the iconic Taj Mahal in Agra.



PHARM D STUDENTS AND FACULTY ATTEND AVISCON 2024 SEMINAR IN MYSURU

Dr. Vimal Kumar, Dr. Prasanth S.S., and third-year Pharm.D. students at AVISCON 2024 Seminar, JSS College of Pharmacy, Mysuru, March 2nd, 2024.



EDUCATIONAL EXCURSION: EXPLORING SCITUS PHARMA SERVICE PVT LTD IN CHENNAI

Seventh semester B.Pharm students, accompanied by Dr. S. Vimal Kumar, Ms. Sreelakshmi, Ms. Krishnapriya Anil, and Mrs. Surya Raju, embarked on a three-day educational visit to Chennai from

March 3rd to March 5th, 2024. The itinerary included visits to CEFTE, SRIHER, and Scitus Pharma Services Pvt Ltd, where students immersed themselves in learning

about pharmaceutical industry operations. Through interactive sessions and comprehensive facility tours, they gained valuable insights into research, manufacturing, and quality control processes. This educational expedition was instrumental in enhancing the students' understanding of real-world pharmaceutical practices and their academic journey.



VISIT TO CHETANA PHARMACEUTICALS, PERINTHALMANNA

On May 16, 2024, the Department of Pharmaceutics' practice school students conducted an illuminating industrial visit to Chetana Pharmaceuticals in Perinthalmanna. Led by Mrs. Ancy, Mr. Jayaraj, and Mr. Vijesh, the visit commenced at 10:00 AM with a focus on the sterile production area for ophthalmic products. Mrs. Ancy detailed the stringent processes for maintaining product sterility, while Mr. Jayaraj emphasized precision in labeling and packaging. Mr. Vijesh elaborated on analytical and microbiological testing procedures, including UV Spectrophotometry and sterility testing. The visit underscored the importance of quality control and provided practical insights into pharmaceutical manufacturing processes.

Industrial visit to Chetana Pharmaceuticals, Perinthalmanna 16-05-2024 at 10 am



Organized by Department of Pharmaceutics for Practice School Students

EXPLORING CLINICAL PHARMACY: 2ND YEAR D.PHARM STUDENTS' ENLIGHTENING VISIT TO KIMS AL SHIFA HOSPITAL

2nd year Diploma students had an illuminating visit to KIMS Al Shifa Hospital, Perinthalmanna on 30-04-2024. The visit helped the students to understand various clinical activities carried out by a pharmacist.

Students were taken to various divisions in hospital like The Drug Information Center(DIC), ADR Monitoring center(AMC), IP and OP Pharmacies, where they were able to acquire knowledge about various softwares used in the practice, working of the pharmacy right from procurement to dispensing



of medication, LASA drugs, high alert medications, ADR reporting form and software...suggest a title for news letter content

INDUSTRIAL VISIT BY 8TH SEMESTER B.PHARM

Students of the 8th Semester B.Pharm are currently on an industrial tour to northern India. They had the opportunity to visit the iconic Taj Mahal, one of the Seven Wonders of the World. Here's a memorable snapshot of them alongside our esteemed faculty, capturing the essence of this incredible experience.



FOCUS ON MOU'S

MoU Signed: Al Shifa College of Pharmacy Partners with Sance Laboratories Pvt Ltd

Al Shifa College of Pharmacy has forged a strategic partnership with Sance Laboratories Pvt Ltd. On February 29, 2024, Prof. Junise V, Dr. Preetha S Panicker, and Mr. Ajith Chandran visited the laboratories to sign a memorandum of understanding (MoU). This collaboration aims to provide students with valuable real-world experience through industrial training in the pharmaceutical industry.



ALUMNI CORNER

Al Shifa College of Pharmacy Boosts Learning Environment with Alumni Donation

Al Shifa College of Pharmacy extends its appreciation for a generous donation from one of its esteemed alumni members. The contribution was utilized to enhance the learning experience by acquiring a public address system and a slide changer.

Mr. Jayadev, President of the Alumni Association of Al Shifa College of Pharmacy, officially presented the donation to the college in the presence of Mr. Faisal, Manager of Al Shifa College of Pharmacy. Dr. Dilip C, Principal, emphasized the significance of a robust alumni network in the institution's growth.



AL SHIFA COLLEGE OF PHARMACY ALUMNA EXCELS IN PHARMACEUTICAL RESEARCH AT IIT MADRAS

Al Shifa College of Pharmacy proudly announces the outstanding accomplishments of Leena, an esteemed alumna from the inaugural batches of the B.Pharm and M.Pharm (Pharmaceutical Chemistry) programs. Leena's unwavering curiosity and passion for research led her to pursue PhD at the prestigious Indian Institute of Technology Madras (IIT Madras).

At IIT Madras, Leena explored the complexities of carbonyl reductases, focusing on their significant impact on drug efficacy and xenobiotic metabolism. Her research, conducted under the expert mentorship of Prof. Anju Chadha, a renowned biochemist, and Prof. Sathyanarayana N. Gummadi, Dean of Students and distinguished biochemical engineer, has made notable advancements in pharmaceutical sciences.

Leena's journey epitomizes Al Shifa College of Pharmacy's dedication to fostering academic



excellence and pioneering research. Her achievements not only bring honor to her alma mater but also serve as an inspiration to current students, encouraging them to pursue their academic and research goals with dedication and enthusiasm.

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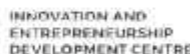
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