



Prime College of Pharmacy

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THE INSIGHT

Prime Pharma
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AI-DRIVEN SOLUTIONS PROMOTE MEDICATION ADHERENCE

Artificial intelligence (AI) and machine learning are valuable tools for predicting medication adherence for various conditions, such as diabetes and hypertension, for which AI has been shown to achieve 70% to 80% accuracy in identifying nonadherent individuals. To date, the FDA has approved over 60 AI-equipped medical devices, indicating a substantial trend in the integration of AI in health care. Machine learning, a subset of AI, can analyze large, intricate data sets using sophisticated algorithms and techniques, extracting valuable insights and patterns. Machine learning has been effectively utilized to predict medication adherence in various medical conditions, such as opioid use disorder, type 2 diabetes, hypertension. Moreover, machine learning techniques have been employed to forecast the likelihood of non-adherence in individuals with type 2 diabetes, demonstrating the potential to identify patients susceptible to suboptimal medication adherence. AI has also been employed to develop tools for providing comprehensive assessments of patients’ adherence behaviors and psychological factors influencing adherence levels. For instance, AI-based tools have been designed to evaluate self-reported adherence to medication, offering insights into patients’ adherence behaviors and barriers. These interventions were customized to meet the individual needs of patients and could include motivational messages, behavioral interventions, and psychological support for individuals with chronic conditions, such as affective disorders and schizophrenia.



Dr. Archa S
Associate Professor
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SHINGLES VACCINE COULD PROTECT CARDIOVASCULAR HEALTH

Shingles occurs when the varicella-zoster virus (VZV), which causes chickenpox, reactivates and causes a painful rash illness. According to the CDC, an estimated 1 million individuals experience shingles each year in the US. In most cases, individuals only develop shingles once in their lifetime; however, the illness can reoccur. The risk of developing shingles increases with age, medical conditions that impact the immune system, along with medications that do not allow the immune system to work properly. The virus commonly presents as a rash around the side of the body, which could lead to serious complications, including postherpetic neuralgia—which is long-term nerve pain. The CDC provided that individuals that never had the chickenpox or did not receive the chickenpox vaccine can get infected with VZV if in contact with an individual that has shingles. The virus can spread through direct contact with the fluid from the shingles rash blister, or by breathing in virus particles that come from the blisters. The CDC recommends all individuals 50 years and older to receive 2 doses of the recombinant zoster vaccine (RZV, Shingrix) to protect against shingles. Clinical trials conducted and the vaccine was 97% effective in preventing shingles in adults 50 to 69 years and 91% effective in individuals 70 years and older. The study assessed the link of shingles with the risk of stroke or heart disease among 3 large US cohorts—the NHS , NHS II (Nurses' Health Study II), and HPFS . The study provided data from a total of 205,030 individuals. The results displayed that, among all 3 cohorts, individuals with shingles had a 30% increased risk of developing future cardiovascular events.



Ms. Aiswarya. S
Assistant Professor
Department of Pharmaceutics

WORLD KIDNEY DAY

It is an annual event that aims to raise awareness about the importance of our kidneys and the vital role they play in our overall health. The theme for the 2024 campaign is “Kidney Health for All - Advancing Equitable Access to Care and Optimal Medication Practice”. This theme focuses on the increasing burden of chronic kidney disease and achieving optimal kidney care to overcome these challenges at different levels. VIII Semester students ,in association with IQAC and NSS (Unit no. NSS/SFU/PK-D/KUHS/1) conducted an awareness programme at Taluk Hospital, Elappully, Palakkad. The goal was to create global awareness about the high and increasing burden of kidney diseases and the need for strategies for kidney diseases prevention and management. Our students distributed pamphlets to educate people about the risk factors and advantages of keeping a healthy way of life to decrease the risk of Chronic Kidney disease. They actively took part in the campaign, stressing the significance of preventive behaviors, risk factors, and how to live with a kidney disease. Dr. Anoop, Medical Superintendent, Elappully, extended his sincere efforts to make this camp a great success.



WORLD CANCER DAY

World Cancer Day aims to promote awareness on cancer as a public health issue and to strengthen actions towards improving access to quality care, screening, early detection, treatment and palliative care. This year’s theme marks the second year of the campaign “Close the care gap” which is about understanding the inequities in cancer care and taking actions to make the necessary progress to address them. We conducted an awareness programme on 5th February at Taluk Headquarters Hospital, Chittur, Palakkad. The awareness programme was inaugurated by Medical Superintendent, Dr. Anilkumar. He focussed on examining the socioeconomic factors that lead to disparities in cancer prevention, incidence and survival, such as cultural and gender norms, income and education levels, and biases based on age, gender, ethnicity, disability and lifestyle. Additionally, the call for increased action to improve cancer awareness, prevent cancer, support advancements in diagnostics and treatment, and address the shortcomings in health systems was also highlighted. Third Semester B. Pharm students actively participated in the programme by distributing leaflets and made individual interaction and created awareness among patients and public regarding cancer prevention and early diagnosis. Mr.Suraj, Health Inspector, Public relative officer has given the fecilitation.



WORLD LEPROSY DAY

World Leprosy Day is observed every year on the last Sunday of January. In India, it takes place on 30 January every year. The theme for World Leprosy Day 2024 is “Beat Leprosy”. This theme encapsulates the dual objectives of the day: to eradicate the stigma associated with leprosy and to promote the dignity of people affected by the disease. The theme of “Beat Leprosy” serves as a powerful reminder of the need to address the social and psychological aspects of leprosy, alongside the medical efforts to eliminate the disease. It calls for a world where leprosy is no longer a source of stigma but rather an opportunity to demonstrate compassion and respect for all individuals. The NSS UNIT (NSS/SFU/PKD/KUHS/1) along with IQAC of Prime College of Pharmacy in collaboration with Kodumbu Grama Panchayath has conducted an awareness program at 11th ward. Mr. Chandran C, 11th ward member has inaugurated the programme. The students were divided in to five groups and given awareness about the leprosy to the public. They covered around 118 houses in the areas of Alayamkadu, Velunkadu and Kadiramkunnam. Asha worker Mrs. Rajakumari has also accompanied the students. Mrs. Jyothi A & Ms. Ameena Salim has coordinated the programme.



SANTHWANA SANGAMAM-PALLIATIVE CARE FAMILY GETTOGETHER

As a part of palliative care family get together “SANTHWANA SANGAMAM” the NSS unit (NSS/SFU/PKD/1) of Prime College of Pharmacy in collaboration with Elappully Taluk hospital had conducted the cultural programmes for the people on 7 February 2024 at Sreedevi Auditorium, Kunnachi. The event witnessed the participation of differently abled people and their families. Our third semester students performed cultural programmes for them. Dr. Anoop, Medical Superintendent, Elapully welcomed the gathering. The presidential address was given by Mrs. Rajakumari, Standing Committee Chair Person, Health Department. The program was officially inaugurated by Mrs. Revathy Babu, President, Elappully Grama Panchayth. The felicitation was given by Mr. Sunilkumar, Vice President, Elappully Grama panchayath and Mr. Saravanan, Kshema Standing Committee member. The vote of thanks was given by Mrs Beena, Health Inspector, Elappully. The event was memorable for all the palliative care members. Mrs. Jyothi. A, Associate Professor & Mrs. Poornima. M, Assistant Professor, Prime College of Pharmacy accompanied the students for their active participation along with health workers of Taluk Hospital, Elappully.



EMPHASIS ON ARTIFICIAL INTELLIGENCE (AI) IN PHARMA

To find possible therapeutic targets, AI systems can analyse a variety of data sources, including clinical, proteomic, and genomic data. AI aids in the development of drugs that can alter biological processes by identifying targets and molecular pathways linked to disease. AI makes it possible to efficiently screen large chemical libraries in order to find therapeutic candidates that are highly likely to bind to a particular target. AI saves time and money by helping researchers prioritise and choose compounds for experimental testing by modelling chemical interactions and forecasting binding affinities. By creating molecules with desirable properties like high potency, selectivity, and favourable pharmacokinetic profiles, artificial intelligence (AI) models can optimise drug prospects and create connections between the chemical structure of substances and their biological function. Large-scale biomedical data can be analysed using AI to find current medications that may be useful in treating various illnesses. Pharmaceutical companies, for instance, employ in silico target fishing technology (TF) to forecast biological targets based on chemical structure. This information is given based on the biologically annotated information that is accessible in the chemical database. The mechanism of action and target class information needed for efficient planning were further explored using a number of other techniques, including data mining and chemical structure docking. Using cheminformatics tools and machine learning, the target fishing technique was applied to drug development. AI speeds up and lowers the cost of drug research by repurposing current medications for new applications. Because biological networks can efficiently maintain and quantify the interaction between components of cell systems underpinning human diseases like cancer, artificial intelligence is a cutting-edge technique for finding new anticancer targets and developing innovative therapeutics from these networks. To improve R&D skills, Indian pharmaceutical companies are implementing state-of-the-art digital technologies like machine learning and artificial intelligence. These technologies expedite the process from idea to market, improve clinical trials, and speed up medication discovery. The pharmaceutical sector in India is proof of the nation's capacity to link scientific advancements with extensive commercialization.



Dr. K. Kavitha
Professor
Department of Pharmaceutical Chemistry

INDIA’S FIRST INDIGENOUS ANTIBIOTIC NAFITHROMYCIN: A MILESTONE IN COMBATING ANTI MICROBIAL RESISTANCE (AMR)

Recently, India launched Nafithromycin, India’s first indigenous antibiotic aimed at tackling Anti-microbial Resistance (AMR) pneumonia. Nafithromycin was developed with support from the Biotechnology Industry Research Assistance Council (BIRAC) and brought to market by Wockhardt under the brand name Miqnaf. It is 10 times more potent & provides eight times higher lung exposure than azithromycin. It is faster, safer and more tolerable.(3 day regimen)
Nafithromycin is the first new antibiotic in its class in over 30 years, marking a breakthrough in the fight against AMR. It is designed to treat Community-Acquired Bacterial Pneumonia (CABP), caused by drug-resistant bacteria like Streptococcus pneumoniae. The launch coincides with World AMR Awareness Week (18-24 Nov) 2024 with the theme 'Preventing Antimicrobial Resistance Together'.



Dr. K. Selvaraju,
Professor & HOD
Department of Pharmaceutics

NEWER TRENDS IN DIAGNOSING AND TREATING DISEASES:
A TRANSFORMATIVE ERA IN HEALTHCARE

Healthcare is experiencing a dynamic shift, with advancements in technology and research driving innovations in disease diagnosis and treatment. New methodologies, technologies and personalized approaches are reshaping how to identify, manage and treat a variety of diseases. Artificial Intelligence (AI) and machine learning (ML) are revolutionizing the way diseases are diagnosed. AI powered algorithms are now being used to analyse medical images such as CT scan, MRI's and X-Rays with unprecedented accuracy. Advancement in genomics have made it possible to tailor treatments based on an individual's genetic makeup. By sequencing a patient's DNA it is easy to identify genetic mutations and variations that contribute to certain diseases allowing for patient specific treatment plans. This approach is especially transformative in oncology, where target therapies can be developed to attack specific cancer cells, minimizing damage to healthy tissue and improving patient outcomes. And in psychiatric conditions where genetic factors play a significant role. Liquid biopsy is a revolutionary diagnostic tool that enables the detection of cancer related genetic mutations and tumor markers through a simple blood test. Liquid biopsies are non-invasive, painless and quicker way to detect cancers at earlier stages. Regenerative medicines focusing on repairing or replacing damaged tissues and organs using stem cells, growth factors and other biological materials. In addition to stem cells 3D printing is being used to create patient specific prosthetics and even printed tissues and organs.



Dr. Aparna. S. S
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Department of Pharmacy Practice

HARNESSING OSMOTIC SHOCK FOR ENHANCED INTRACELLULAR
DELIVERY OF (NANO) CARGOS

Efficient intracellular delivery of exogenous (nano)materials is critical for both research and therapeutic applications. The physicochemical properties of the cargo play a crucial role in determining internalization efficacy. Consequently, significant research efforts are focused on developing innovative and effective methodologies to optimize (nano)material delivery. In this study, we utilized osmotic shock to enhance (nano)cargos internalization. We examined the effects of hypotonic/hypertonic shock on both primary and cell lines, assessing parameters such as cell viability, cell volume, membrane tension changes, and particle uptake. Our results indicate that short-lived osmotic shock does not harm cells. Hypotonic shock induced temporary shape changes lasting up to 5 min, followed by a 15-minute recovery period. Importantly, hypotonic shock increased the uptake of 100-nm and 500-nm particles by 3- and 5-fold, respectively, compared to isotonic conditions. In contrast, the hypertonic shock did not impact cell behavior or particle uptake. Notably, the internalization mechanisms triggered by osmotic shock operate independently of active endocytic pathways, making hypotonic stimulation particularly beneficial for hard-to-treat cells. When primary fibroblasts derived from amyotrophic lateral sclerosis (ALS)-patients were exposed to hypotonic shock in the presence of the therapeutic cargo icerguastat, there was an increased expression of miR-106b-5p compared to isotonic conditions.



Mr. Arun Giri Raj V
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PRIME AGON

Prime College of Pharmacy successfully organized the College Sports Fest –PRIME AGON 2024 on 15-06-2024. Prof. Dr. N.L. Gowrishankar, Principal, Prime College of Pharmacy inaugurated the Sports Fest. Students were divided into four groups and they actively took part in the Indoor and Outdoor games with great competitive spirit. They were involved in various Indoor games including Chess, Carroms, Table Tennis held from 28-05-2024 to 30-05-2024. The Outdoor games like Badminton, Volley Ball, Shotput, Javelin, Tennikoit, Cricket and Football were held on 15-06-2024. The Overall Championship was presented to the Group I with highest number of points. The certificates and trophy was handed over to the winners at the end of day. The teaching, non teaching and student volunteers worked together to bring every event to completion without hassles. There was a spirit of sportsmanship, camaraderie and cheer in the air.



PHARMA ANVESHAN 2024

PCI has declared March 6 to be National Pharmacy Education Day in remembrance of Prof. Mahadeva Lal Schroff's birth anniversary and to honour his role in founding Pharmacy Education in India. On behalf of this day, Fifth Semester B Pharmacy students of Prime College of Pharmacy attended a one day National Seminar- PHARMA ANVESHAN 2024- “ Leveraging Synergism : Industry Academia Partnership For Implementation of National Education Policy,2020” held at St. James’ College of Pharmaceutical Sciences, Chalakudy. The inaugural address was given by Dr. Sarath Chandran C, Central Council Member, PCI, Assoc. Prof., Pariyaram Medical College. Dr. David Paul, Asst. Prof. NIPER, Kolkatta in his talk on ”Importance of Industry- Academia Partnership for Vikasith Bharath”. The next session on Pharma-Academia Partnership was given by Mr. P U Abdul Nazeer, Production Manager, Kriti Life Sciences, Chalakudy. The fourth session on-“Regulatory Quality Control of Drugs and Pharmaceuticals”was given by Mr. Abdul Nazar K, Analyst, Drugs Control Department. Next session on ‘Antibiotic Awareness “ was given by Dr. Nishith M C, District Drugs Inspector, Malappuram.



INTERNATIONAL WOMEN’S DAY 2024

International Women’s Day, observed globally on March 8, is a day dedicated to honoring women’s achievements, recognizing their struggles for gender equality, and celebrating their contributions to various sectors such as culture, politics, and society. Apart from advocating for their rights and supporting organizations that focus on women’s causes, International Women’s Day also promotes gender equality and drives social change. It is a perfect opportunity to be aware of the issues of gender equality. Through various events and initiatives, the International Women's Day empowers individuals and communities to learn about the challenges women face and work towards solutions. The theme for International Women’s Day 2024 is ‘Count Her In: Invest in Women - Accelerate Progress’. On behalf of International Women’s Day, Prime College of Pharmacy organized various programmes like Mehandi competition, Face painting competitions & Cooking without fire competitions for our students. The students from all the batches actively participated and showed their enthusiastic performance in the competitions. The programme ended by highlighting the concept that everyone, everywhere can play a part in helping forge gender equality.



NEW ZEALAND REPORTS FIRST CASE OF H7 BIRD FLU

SYDNEY, Dec 2 (Reuters) - Highly pathogenic avian influenza has been detected at a poultry farm in New Zealand's South Island, authorities said on Monday, the first time the island nation has reported a highly pathogenic variant of avian influenza. Tests showed a rural chicken farm in the Otago region identified the H7N6 subtype, Biosecurity New Zealand said in a statement. It is not the H5N1 type that has spread globally and raised fears of human transmission. We are taking the find seriously our testing shows it is unrelated to a H7 strain that was identified in Australia earlier this year," an official said.



Mrs. Anjitha. K
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AN APPETIZER CAN STIMULATE IMMUNE CELL’S APPETITE, A BOON FOR CANCER TRE ATMENTS.

Cancer still remains one of the most feared diseases in the modern world according to the world health organization, it affected one person in three and caused a quarter of all deaths in the developed world. Cancer cells are formed when normal cells lose the normal regulatory mechanisms that control growth and multiplication. The body has a veritable army constantly on guard to keep us safe from microscopic threats from infections to cancer . Chief among this force is the macrophage,a white blood cells that surveils tissues and consumes pathogens,debris,dead cells,and cancer. Macrophages have a delicate task. It’s crucial that they ignore healthy cells while on patrol,otherwise they could trigger an autoimmune response while performing their duties.researchers at UC Santa barbara sought to uderstand how these immune cells choose what and when to eat.A papper published in developmental cell describes how the team programmed macrophages to respond to light in order to investigate how encounters with cancer cells change the macrophages’ appetite.The results present a new way to increase the effectiveness of cancer immunotherapies that harness macrophages to combat the disease.It also offers a more complex account of trained immunity,a kind of memory exhibited in the innate immune system that scientists have only recognized.

Natural killer(NK) cells expressing interleukin -21 show promising antitumor activity in glioblastoma cells.These cells engineered to express interleukin-21(IL-21)demonstrated sustained antitumor activity against glioblastoma stem cell-like cells(gscs)both in vitro and in vivo,according to new research from the university of texas MD Anderson cancer center.The pre clinical findings, published in cancer cell,represent the first evidence that engineering NK cells,a type of innate immune cell,to secrete IL-21 resulted in strong activity against glioblastoma,a cancer type in need of more effective treatment options.glioblastoma is an aggressive brain cancer with limited therapeutic options.Current treatment options for glioblastoma include surgery,radiation therapy & chemotherapy-,but these options offer limited efficacy and patients have a median survival of just 18-21 months. According to the National Brain Tumor Society,the 5 year survival rate for patients with glioblastoma is only 6.9%,with an average estimated lenth of survival only eight months.As part of the innate immune system,NK cells have a natural ability to recognize & eliminate GSCs.



Ms. Bincy
Lecturer
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INDIVIDUALISED NEOANTIGEN CANCER VACCINE THERAPY

Active specific immunotherapy with personalised cancer vaccines has been investigated for more than 40 years. In the 1970s, cancer vaccines by injection of patient-derived autologous tumour cells or tumour lysates were given to patients and achieved modest outcomes. For example, Laucius and colleagues reported that a vaccine consisting of autologous, irradiated melanoma cells mixed with adjuvant Bacillus Calmette-Guérin resulted in regression of metastasis in four of 18 participants with surgically incurable melanoma. Additionally, the concept of neoantigens (new antigenic determinants) was investigated by Berd and colleagues by modifying autologous cancer cells with the hapten, dinitrophenyl, to induce an immune response against melanoma cancer cells. They treated 214 patients with clinical stage IIIB–C melanoma with adjuvant dinitrophenyl-modified autologous cancer cell vaccine and noted improvement of 5-year overall survival in patients who developed delayed type hypersensitivity to unmodified melanoma cells compared with those without delayed type hypersensitivity response (5-year overall survival rate; 59.3% vs 29.3%; p<0.001). The first US Food and Drug Administration approval for a therapeutic cancer vaccine in 2010 was for an autologous dendritic cell-based vaccine loaded with a prostatic acid phosphatase-granulocyte-macrophage colony-stimulating factor fusion protein for advanced castrate-resistant prostate cancer. However, with the approval of immune checkpoint inhibitors in the past decade, the focus of cancer immunotherapy shifted from individualised cancer vaccines to non-personalised treatments.



Mrs. Bhavana. R
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Department of Pharmaceutics

MATERIOVIGILANCE PROGRAMME OF INDIA: A STEP TOWARDS PATIENT SAFETY

The Materiovigilance programme in India was launched on 2015 July 6, at the IPC with the objective of monitoring adverse events, thereby reducing risks related to use of medical devices and also creating awareness among different stakeholders for improving patients’ safety. Materiovigilance (Mv) has the same purpose and approach in ensuring patient safety as pharmacovigilance but deals with medical devices associated with adverse events (MDAEs) and their monitoring. Mv has been instrumental in recalling many defective or malfunctioning devices based on their safety data. All MDAEs, such as critical or non-critical, known, or unknown, those with inadequate or incomplete specifications, and frequent or rare events should be reported and evaluated. Mv helps to improve medical devices’ design and efficiency profile and avoid device-related complications and associated failures. It alerts consumers and health professionals regarding counterfeit or substandard devices. Common events reported through Mv are device breakage and malfunction, entry- and exit-site infections, organ perforations or injuries, need for surgery and even death, and life cycle assessment of devices. Health authorities globally have developed reporting frameworks with timeframes for MDAEs, such as MedWatch in the USA, MedSafe in New Zealand, and others. Health professionals need to be made aware of the significance of Mv in ensuring the safe use of medical devices and getting familiar with the reporting procedures and action plans in case of a device-induced adverse event.



Mrs. Aiswarya A T
Associate Professor
Department of Pharmacy Practice

CAREER GUIDANCE PROGRAMME 2024 BY GRIFFITH COLLEGE

Placement cell of Prime College of Pharmacy, Palakkad organized a Career Guidance Programme 2024 on “Global Career Opportunities for Pharmacy Students-Special Focus on Ireland” by Griffith College, hosted by EazyLink Academy, a well known a global education group based at Kerala. The final year M Pharmacy, Eighth Semester and Seventh Semester B Pharmacy students actively took part in the session held on 06-06-2024 at College auditorium. The programme begun with the Welcome and Inaugural address by Prof. Dr. N.L. Gowrishankar, Principal, Prime College of Pharmacy. The session was fortunate with the presence of eminent distinguished personalities including Mr. Deepak Luthra, Director of Admissions, South Asian Region, Griffith Tri Campuses, Ireland, Mr.Sony Akkara, Founder & Executive Director, Ms. Prathibha Biju, Regional Head-Admissions and Mr. Dhivine Vince, Regional Head-Institutions of EazyLink Academy Private Limited. Mr. Deepak Luthra, an Internationally Recruitment Director responsible for the customized recruiting and marketing plans for the International students from South Asian Region for the Griffith campuses, Ireland delivered a very informative talk on the various courses, modules and campuses in Ireland. He detailly explained about the importance of Ireland among the Pharmacy students and the diversified career opportunities. He interacted with the students sharing his expertise on the application and admission procedures of Ireland institutions. Students had a very active participation in the interactive query session held thereafter. The session greatly inspired the students about the career options in the Pharmaceutical industry in Ireland.



WORLD NO TOBACCO DAY 2024

World No Tobacco Day (WNTD) is observed around the world every year on 31 May. As a part of this day, Seventh Semester B Pharmacy students of Prime College of Pharmacy, in association with IQAC and NSS (Unit no. NSS/SFU/PKD/KUHS/1) organized an awareness camp at Kootupaatha Junction, Palakkad. The students highlighted the importance of protecting the younger generation from harmful and deadly effects of Tobacco smoke use and second hand smoke exposure. They performed flashmob to to draw attention to the widespread prevalence of tobacco use and to negative health effects. They also distributed pamphlets, which emphasised on WHO’s theme for 2024 that is ‘Protecting Children from Tobacco Industry Interference’. The public awareness camp about World No Tobacco day was successfully coordinated by Dr . P. Sivakumar , Head of Department, Pharmacy Practice and Dr. Neehara, Assistant Professor, Prime College of Pharmacy.



PRIME PHARMA PLACEMENT DRIVE 2024: LIFE PHARMACY UAE

We organized a Placement drive with Suhail Enterprises for LIFE Pharmacy, UAE, Dubai for the final year B. Pharm , M. Pharm and Pharm D students on 24-04-2024. Mr. P.E Thajumon, HR Manager, Suhail Enterprises Dubai, delivered the felicitation. Panel of two members, Mr. P.E Thajumon, HR Manager, and Mr. A, Safeerullah, Asst. HR Manager , Suhail Enterprises conducted the interview session for the posts of Pharmacists, Trainee Pharmacists, Sales Associates and Trainee Pharma Executives. Life Pharmacy started its journey in 1996 with a strong impulse to provide state-of-the-art experience in healthcare retail. Starting with one store, LIFE Pharmacy in UAE has 425+ retail outlets consisting of Pharmacies, Healthcare Hypermarkets, Health and Wellness stores catering to an average annual customer base of more than ten million walk-ins. LIFE Pharmacy is also the number one Online Pharmacy in UAE. LIFE received the DSF 2010 Innovation Award in the category of Best Retail- Customer Service. LIFE was awarded at the Retail ME Awards in the category of Healthcare & Beauty for 2011, Most Admired Store Manager for the year 2012, Most Admired Retail Pharmacy for the consecutive years 2013, 2014 and 2015. LIFE achieved the coveted Super brands status successfully for the past eight consecutive years in 2011, 2012, 2013, 2014, 2015, 2016, 2017 and 2018 as well. About 60 students from various colleges registered the interview held in the college auditorium. They took part in the personnel interview session followed by the group discussion. The shortlisted candidates were informed to report for the final round of interview. Overall, the LIFE team's experience and reviews were excellent since our students met their organization's requirement to find the proper talent to help it achieve its goals.



PRIME PHARMA PLACEMENT DRIVE 2024 BY APOLLO PHARMACY

Placement cell of Prime College of Pharmacy, Palakkad organized a PRIME PHARMA PLACEMENT DRIVE 2024 by Apollo Pharmacy for the final year B Pharmacy and second year D Pharmacy students on 18-05-2024. Mr. Jyothis Jhonson, Senior Executive –HR, Apollo Hospital Enterprise Limited, Unit: Apollo Pharmacy, Ernakulam delivered the felicitation. Trainee Pharmacists and Clinical Pharmacists. About 90 students actively took part in the Placement drive held in the College auditorium. They took part in the personnel interview session and the shortlisted candidates were informed to report for the final round of interview. As our students fulfilled the organization's need to identify the right personnel to assist it in achieving its objectives, the Apollo Pharmacy Group experience and reviews were overall outstanding.



IMPLANTABLE MICRO PARTICLES CAN DELIVER TWO CANCER THERAPIES AT ONCE

Patients with late-stage cancer often have to endure multiple rounds of different types of treatment, which can cause unwanted side effects and may not always help. In hopes of expanding the treatment options for those patients, MIT researchers have designed tiny particles that can be implanted at a tumor site, where they deliver two types of therapy: heat and chemotherapy. This approach could avoid the side effects that often occur when chemotherapy is given intravenously, and the synergistic effect of the two therapies may extend the patient's lifespan longer than giving one treatment at a time. In a study of mice, the researchers showed that this therapy completely eliminated tumors in most of the animals and significantly prolonged their survival. "One of the examples where this particular technology could be useful is trying to control the growth of really fast-growing tumors," says Ana Jaklenec, a principal investigator at MIT's Koch Institute for Integrative Cancer Research. "The goal would be to gain some control over these tumors for patients that don't really have a lot of options, and this could either prolong their life or at least allow them to have a better quality of life during this period." Patients with advanced tumors usually undergo a combination of treatments, including chemotherapy, surgery, and radiation. Phototherapy is a newer treatment that involves implanting or injecting particles that are heated with an external laser, raising their temperature enough to kill nearby tumor cells without damaging other tissue. Current approaches to phototherapy in clinical trials make use of gold nanoparticles, which emit heat when exposed to near-infrared light. To create a microparticle that could deliver both of these treatments, the researchers combined molybdenum disulfide nanosheets with either doxorubicin, a hydrophilic drug, or violacein, a hydrophobic drug. To make the particles, molybdenum disulfide and the chemotherapeutic are mixed with a polymer called polycaprolactone and then dried into a film that can be pressed into microparticles of different shapes and sizes. To optimize the treatment protocol, the researchers used machine-learning algorithms to figure out the laser power, irradiation time, and concentration of the phototherapeutic agent that would lead to the best outcomes. That led them to design a laser treatment cycle that lasts for about three minutes. During that time, the particles are heated to about 50 degrees Celsius, which is hot enough to kill tumor cells.



Mrs. Greeshma. S
Associate Professor
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DR REDDY'S LAUNCHES IMMUNO-ONCOLOGY DRUG TORIPALIMAB IN INDIA FOR TREATING NASOPHARYNGEAL CARCINOMA

Dr. Reddy's Laboratories launched Zytorvi (Toripalimab), a novel immunotherapy drug for recurrent or metastatic nasopharyngeal carcinoma (NPC), a rare head and neck cancer. This marks India as the third country globally with access to this next-gen PD-1 inhibitor, offering a superior treatment alternative to standard chemotherapy. They will market the drug under the brand name Zytorvi in India. As the next generation PD-1 inhibitor, Toripalimab has demonstrated superior outcomes for RM-NPC versus standard of care, thereby meeting a significant unmet need for patients with NPC in India.



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Department of Pharmaceutics

PRIME PHARMA CONCLAVE 2024

A two-day International Conference- “Prime Pharma Conclave 2024: Reimagining The Emerging Pharmacy Scenario” on “Translational Research In Academic Organizations: From Bench To Bedside” was organized by Prime College of Pharmacy in association with Indian Pharmacy Graduates’ Association (Kerala State Branch). The International Conference held on 11th and 12th of January 2024, aimed to bring light to various aspects and thereby sparking thoughtful discussions and stimulating new ideas. About 600 delegates, students and well distinguished national and International speakers actively took part in the two day Conference. Prof. Dr. N.L Gowrishankar, Principal, Prime College of Pharmacy delivered the welcome address and followed by the Presidential Address by Dr. P.A Mohammed Ashraf, Chairman, Prime Educational and Charitable Trust. Dr. Rajasree. R.S, Honourable Dean, Faculty of Pharmaceutical Sciences, KUHS, inaugurated the prestigious ceremony followed by the abstract release. Shri. P. M. Jayan, President, IPGA, Kerala State Branch, delivered the Key note address and Special address was given by Prof. Dr C.I. Sajeeth, Executive Trustee, Prime Educational and Charitable Trust. Dr. C S Satheesh Kumar, Vice President, IPGA released the Newsletter- INTRUZION. The first scientific session on “Relevance and Scope of Social Media in Current Pharmaceutical Academic And Research Environment” was delivered by Dr. Kamal Dua, Senior Lecturer University of Technology Sydney, Discipline of Pharmacy Graduates, School of Health, Sydney, Australia. Dr. Harish Dureja, Dean, Faculty of Pharmaceutical Sciences, Maharshi Dayanand University, Rohtak, Haryana presented the second scientific session on “Digital Therapeutics & Pharmaceutical Regulatory Environment. Third scientific session was given by Dr. K. Gowthamarajan, Prof. & HOD of Pharmaceutics, JSS academy of higher education and research, Mysore, Karnataka on “Pharmaceutical Research-Current and Future Challenges”. Dr. Sachin Kumar Singh, Prof. & Head of Dept. of Pharmaceutical Chemistry & Analysis, School of Pharmaceutical Sciences, Lovely Professional University, Punjab delivered the last scientific session of the day on “Cross Talk Between Phytoconstituents And Nanotechnology In Mitigating Various Diseases”. After the four scientific sessions, the first day ended with incredible cultural programmes by our students. The second day of Prime Pharma Conclave 2024 started with the scientific session by Dr. Satheesh Babu Natarajan, HOD of Pharmaceutics, Faculty of Pharmacy, Lincoln University College, Malaysia on “Entrepreneurial Opportunities In Herbal Industry”. The heart of the Prime Pharma Conclave 2024 was the Live Demonstrations-“3D Printing” by 3-ZERO and “Beyond Boundaries-AR-NR reshaping Pharma Landscape” by Kewaunee Labway India Pvt Ltd was really engaging. Students and delegates of different departments of various colleges actively participated in the e-poster presentations. The scientific sessions ended with a talk by Mr. Anoop Ambika, Chief Executive Officer, Kerala Start Up Mission, Nodal Agency of Government of Kerala on “Start Up Mission: Start Up Opportunities And Government Schemes In Pharmacy Field”. The most awaited IPGA Meritorious Award ceremony and Valedictory function was held after the scientific sessions. Presidential Address by Shri. P. M. Jayan, President, IPGA, Kerala State Branch. Mr. Anoop Ambika Chief Executive Officer, Kerala Start Up Mission, Nodal Agency of Gov. of Kerala proudly inaugurated the IEDC of our college. Dr. Rajasree. R.S, Dean, Faculty of Pharmaceutical Sciences, KUHS delivered the special address and Mr. Abdul Nazeer, Exe. member IPGA felicitated the gathering, followed by the declaration of IPGA Awards by Mr. Dileep. G, Secretary, IPGA, Kerala State Branch. Ramabhadran Memorial Best Pharmacy Teacher Award was awarded to Dr. Dileep K.J, Professor, T.D Medical College, Alappuzha. N. Chandrashekhar Nair Memorial Best Drug Regulatory Officer Award was presented to Mr. Joshy T I, Drugs Inspector, Ernakulam. G.R. Nair Memorial Best Community Pharmacist was awarded to Mr. Patroni DCosta. Dr.S. B. Rao Memorial Best Industrial Pharmacist was awarded to Mr. Sreejith P.R. The certificates, cash award and memento was distributed to the winners of e- poster presentations.

