



GURUNANAK COLLEGE OF PHARMACY NAGPUR

INDOCTRINATE



IQAC NEWSLETTER - 19 16 June 2019

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Technical Article

Artificial Intelligence InPharma and Healthcare Sector

Mr. T.M.Rasala Asst Professor

Artificial Intelligence (AI) is the branch of engineering science which deals with making of intelligent machines, especially intelligent computer programs. It is the ability of a computer or a robotic computer enabled system to process the given information and produce outcomes in a manner similar to the attention process of humans in learning, decision making and solving problems. AI is a branch of computer science that aims to create intelligent machines, which becomes an essential part of the technology industry. Research associated with AI is highly technical and specialized. The artificial intelligence term was used in the year 1956, and the concept was used from the year 1950, under the topics of problem solving and symbolic methods.

The design of intelligent machines based upon the neural networks and perceptron. The artificial neurons think like human beings in learning, solving problems and decision making. AI uses multiple technologies to sense, act and understand from the past experience. It is an extensive area of computer science which makes machines and computer programmes skilful for problem solving and learning similar to human brains. It includes Natural Language Processing (NLP), pattern recognition, interpretation, visual checking and decision making. The AI process involves the development of computational approaches to carry out the task automatically.

The studying of AI involves how machines can be made to simulate aspects of intelligence. The psychologist Frank Rosenblatt in 1950s established the mechanical brain known as the Perceptron (having neural networks). Perceptron system consists of arrangement of neurons in the forms of layers, each neuron is considered as one unit. Similar to physiological neurons, every neuron is connected to other neurons present in surrounding layers. Each layer transmits signal to the next layer after reaching to the threshold point. Scientists strived a lot to develop reliable, efficient neutral networks. They designed the network with multiple layers. The process of regulating the input weight depends upon the ability to send information from output of device backwards through the successive layers. The interruption of weighing adjustments can be avoided by separating the layers of neurons during the learning process.

AI assists and provides solutions to researchers to study vast amounts of raw data, process them, and even find solutions that are a perfect fit for patients. AI has also made inroads into how these companies market their products and how they use data science to give informed actions to customers. AI contributes in improving the speed and drug discovery processes in pharma. Experts believe that AI will assist in better decision making, improve delivery and make the pharma industry more efficient than ever.

Disease Diagnosis: With the help of AI, it becomes easier to run clinical tests, diagnose diseases and provide the most effective treatment for a particular disease. As it can interpret test results, AI can also look through various sources including publications to correctly diagnose critical ailments.

Drug Discovery: With the industry spending well over 1 billion for a new drug, the integration of AI helps to reduce the time taken for drug generation. AI helps in predicting the efficacy and safety of a molecular form. It does this by providing mechanistic insight into the disease and can also identify possible targets. It gives researchers a much broader chemical pallet so they can select the best molecules for drug testing and delivery.

Today, AI is being implemented in every industry that we can think of. Some use it as a buzzword to generate hype while others truly understand the full potential of the value it brings.

To keep up with the 21st century, the pharmaceutical industry is constantly on research mode and AI is drawing plenty of attention in the industry. The widespread success of AI in several industries has led many big pharma companies to invest in it.

· ACCOLADES ·

Accolades

Dr. S. K. Arora and **Mr. K. S. Moharir** received an award of honour as a best participant in AICTE sponsored two weeks faculty development programme on 'Optimization techniques and recent advances in drug delivery systems' organized by and at ISF College of Pharmacy, Moga, Punjab on 10th – 22nd Jun, 2019

Campus Interview by ShrikrishnaPharma Ltd., Hyderabad



Campus selection interview was arranged in college campus for various posts in research and development department by M/s ShrikrishnaPharma Ltd, Hyderabad on 20th Apr, 2019.

In this drive Mr.MangeshJiwtode, Manager (Neutraceuticals) and GNCP Alumnus (B. Pharm, 2004-08) have conducted the interviews and selected students. Dr. S. B. Waikar coordinated and took efforts for the success of the event.



Following students of GNCP qualified GPAT and NIPER Exams in academic session 2018-19.

GPAT-2019 Result

	Class	Name of student	AIR			
	B.Pharm IV	Ms.Ankita Shahu	210			
		Mr. Krishna Thakrani	239			
		Ms.Nandini Nimbalkar	1033			
		Ms. Dolly Mukhi	1560			
		Ms.Isha Jain	1742			
-		Ms.Durga Bansod	1811			
		Ms.Apurva Nagdeve	2478			
		Ms.Priya Meshram	3463			
-		Ms.Payal Dhande	3907			
		Ms.Mayuri Chakole	3907			
*		Ms.Nisha Shambharkar	7716			
1	B.Pharm III	Mr.Punit Verma	941			
3		Mr. Vaibhav Kapgate	3003			
1		Ms. Vaishnavi Vairagade	3651			
		Mr.Hemant Dongre	4044			
		Ms.Tejaswini Kawanpure	4501			
		Mr.Pradip Thakare	4652			
		Mr.Virendra Dhoke	6523			
		Ms.Vibha Madne	8184			
	M.Pharm I	Mr. Shubham Gupta	1680			
		Ms. Rakhi Sarpate				
	B.Pharm	Ms. Trushna jamgade	4185			
	AlumnusI					
		NIPER-2019 Result				
	Class	Name of student	AIR			
	B.Pharm IV	Ms. Ankita Shahu	248			

Ms. Durga Bansod



Republic day celebration: Gurunanak College of Pharmacy celebrated 67th Republic day with zeal and zest. The flag hoisting was carried out by S. Gurbux Singh JiLamba, President of the Sikh Education Society. The function was followed by cultural program and refreshment for staff and students.

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EVENTS

Zenith & Zest 2017-18

The annual social gathering, Zenith and sports event Zest was organised by the students of GNCP and GNTI. Zest 2018-19 was inaugurated by Dr. A.M. Ittadwar on 30 December at 11.00 am. Students enthusiastically participated and conducted annual sports event at Gurunanak College of Pharmacy campus from 30 December 2017 to 3 January 2018. Various sports event like Cricket, Volley ball, Badminton, Table tennis, Tug of war, Chess, Carom, Arm wrestling, Athletics were conducted.

Zenith 2018-19 was inaugurated on the 1st of Mar, 2019 at 1.30 pm by Hon. Chief Guest Mr. Yusuf Mh. Chimthanwala, Director, Mayons Pharmaceuticals Pvt. Ltd., Old Kamptee, Nagpur. Various competitions like Dance, Fashion Show, Singing, Drama, Debate, Pharma Quiz, Fate, Singing, Photography, Treasure Hunt, Rangoli, Drawing, Mehandi, Pharma Court, Best out of Waste were held in this gala event.

Event	Winner/Runner (Class)	Name of Student/Staff Member
Cricket Boys	Winner (M.Pharm)	Mr.Manmay Makkad (Captain), Mr.Swapnil Deshmukh, Mr.Mujahid UlKhair, Mr. Satyam Hatwar, Mr.Harshpal Singh Wahi, Mr.Shubham Gupta, Mr.Jash Parikh, Mr.Paras Kothari, Mr. Rahul Langde, Mr.Sagar Nevargade, Mr.Abhijeet Duf, Mr.Shubham Kalbande, Mr.Rajat Pahwa, Mr.Vaibhav Shende, Mr.Swapnil Yeul
	Runner (D.Pharm I)	Mr. Nikhil Saraf (Captain), Mr. Nikhil Pirwani, Mr.Rohan Pawar, Mr.Suraj Sarniak, Mr.Abhishek Baladhare, Mr.Swapnil Therakar, Mr.Aditya Katwe, Mr.Durvas Lodhi, Mr.Shubh Oberai, Mr.Bhavesh Uttmani, Mr.Pandit Jadhav, Mr.Kunal Paliwal, Mr.Viththal Bhandurge
Cricket Girls	Winner (D.Pharm I)	Ms.Priyanka Sharma (Captain), Ms.Shraddha Kale, Ms.Sakshi Badole, Ms.Diksha Jain, Ms.Shamistan Parveen, Ms.Harshali Dhapodkar, Ms.Shivani Mankar, Ms.Urmila Bondre, Ms.Prachi Bhakre, Ms.Trinkal Thakre, Ms.Aishwarya Bochare, Ms.Chetana Khot, Ms.Rounak Kushwah
	Runner (M.Pharm I)	Ms.Pranita Kale, Ms.Aditi Bapat, Ms.Priyanka Bhaisare, Ms. Shraddha Shahu, Ms.Ankita Soni, Ms.Shital Agashe, Ms. Priya Vasvani, Ms.TaranpreetKaur Bhamrah, Ms. Pooja Bhomle. Ms. Shubhangi Mohije, Ms.Rakhi Sarpate, Ms.Vidya Patil
Throw Ball	Winner (M.Pharm)	Ms.Shital Agashe, Ms.Pranita Kale, Ms.Aditi Bapat, Ms.Taranpreet Kaur, Ms.Pooja Bhomle, Ms.Priya Vaswani
	Runner (B.Pharm II)	Ms.Sakshi Rathi, Ms.Vidhi Dugar, Ms.Chetana Shelote, Ms.Pratiksha Bramhe, Ms.Kajal Bhede, Ms.Sudipa Bose
Volley Ball	Winner (B.Pharm III)	Mr. Yousuf Zaki, Mr. Pradeep Thakare, Mr. Ramkisan Maske, Mr. Tushar Kagde, Mr. Nitin Bire, Mr. Pranay Gajbhiye, Mr. Hemant Dongre, Mr. Mayur Kirpan, Mr. Rahul Gaidhane

	Runner (B.Pharm II)	Mr.Shivam Bhelau, Mr.Kapil Dholwani, Mr.Gaurav Jaiswal, Mr.Ahtesham Raza, Mr.DeveshPelagade, Mr. Mahesh Pimpalkar, Mr.Gaurav Parmal, Mr.Kaustubh Joshi, Mr. Ninad Burkhande
Chess (Girls)	Winner (B.Pharm III)	Ms.Pragati Samarth
	Runner (B.Pharm II)	Ms.Sudipa Bose
Chess (Boys)	Winner (D.Pharm I)	Mr.TusharRamteke
	Runner (D.Pharm I)	Mr.Mojabir Ansari
Carrom (Girls)	Winner (M.Pharm II)	Ms.PriyankaBhaisare
	Runner (M.Pharm I)	Ms.Komal Gupta
Carrom (Boys)	Winner (D.Pharm II)	Mr.PrashikLingayat
	Runner (D.Pharm II)	Mr.AkashWandhre
Carrom	Winner (B.Pharm III)	Ms.Pragati Samarth and Ms.Ragini Amarnani
Doubles (Girls)	Runner (M.Pharm II)	Ms.Priyanka Bhaisare and Ms.Aditi Bapat
Carrom	Winner (D.Pharm II)	Mr.Prashik Lingayat and Mr. Amar Bhaisare
Doubles (Boys)	Runner (B.Pharm III)	Mr. Vaibhav Kapgate and Mr. Yousuf Zaki
Badminton	Winner (B.Pharm II)	Ms.Pratiksha Bramhe
Singles (Girls)	Runner (B.Pharm II)	Ms.Chetana Shelote
Badminton	Winner (M.Pharm II)	Mr.Manmay Makkad
Singles (Boys)	Runner (B.Pharm III)	Mr.Akash Vaishnav
Badminton	Winner Winner	Mr.Mujahid Ansari (M. Pharm II) and Mr. G. A. Gurunani (Staff)
Doubles (Boys)	Runner (M.Pharm II)	Mr.Manmay Makkad and Mr.Swapnil Deshmukh
Badminton	Winner (B.Pharm II)	Ms.Chetana Shelote and Ms.P ratiksha Bramhe
Doubles (Girls)	Runner (B.Pharm III)	Ms.Ragini Amarnani and Ms. Pragati Samarth
	Ruiller (D.1 harm 111)	
Table-Tennis	Winner (B.Pharm III)	Mr.Akhilesh Meshram
(Boys)	Runner (B.Pharm III)	Mr.Anubhav Morghade
Table-Tennis	Winner (M.Pharm II)	Ms.Pranita Kale
(Girls)	Runner (M.Pharm II)	Ms.Shraddha Shahu
Table-Tennis	Winner (B.Pharm III)	Mr.Akhilesh Meshram and Mr.Anubhav Morghade
Doubles (Boys)	Runner (M.Pharm II)	Mr.Swapnil Dehsmukh and Mr.Manmay Makkad
Table-Tennis	Winner (M.Pharm II)	Ms.Shraddha Shahu and Ms.Pranita Kale
Doubles (Girls)	Runner (M.Pharm II)	Ms.Rakhi Sarpate and Ms.Priyanka Bhaisare
` ´	Winner (B.Pharm IV)	Ms.Nandini Nimbalkar
Dance (Solo)	Runner (B.Pharm II)	Mr.Kapil Dholwani
	Runner (M.Pharm II)	Mr.Swapnil Deshmukh
Dance (Duet)	Winner (B.Pharm III)	Ms.Sukanya Waghmare, Ms.Sakshi Maske
Dance (Buct)	Runner (B.Pharm IV)	Ms.Disha Pardhi, Ms.Pratiksha Meshram
Dance (Group)	Winer (B. Pharm I)	Ms. Krishna Patel, Ms. Steffi George, Ms.Rutuja Tijare,
Bance (Group)	(2.1 mm) 1)	Ms. Apoorva Mirche, Ms. Dhanashree Pendam, Ms. Isha Sharma, Ms. Ayushi Chaudhary, Ms. Minal Watkar
	Runer (M. Pharm)	Ms.Pranita Kale, Ms.ShraddhaShahu, Ms.Priyanka Bhaisare, Ms.Shubhangi Mohije, Ms.Sneha Hedau, Ms.Aditi Bapat, Mr.Mujahid UlKhair, Ms.Apurva Shukla, Mr.Swapnil Deshmukh, Mr.Manmay Makkad, Mr. Rahul Langade, Mr.Junaid Ansari, Mr.Jash Parikh, Mr.Atif Ansari
Fashion Show	Winner (M. Pharm I)	Ms.Ankita Soni, Mr.Paras Kothari, Ms.Priya Vaswani, Mr.Shubham Gupta, Mr.Junaid Ansari, Mr.Atif Ansari, Ms.Komal Akare,

	Runner (B.Pharm IV)	Mr.Nihal Landge, Ms.Taranpreet Kaur, Ms.Shital Agashe, Mr.Jash Parikh, Mr. Rahul Langade, Ms.Pooja Bhomle, Ms, Shruti Dongre, Ms.Shivani Chaudhary Mr. Krishna Thakrani, Mr. Nikhil Sonkusare, Mr.MohitDayaramani, Mr.RajatPande, Mr.Labhesh Men, Mr.Yogeshwar trudge, Mr.RishabhKaushik, Mr.IndreshKhungar, Mr.AbhilashBurde, Mr. Nikhil Bokde, Ms.AditiSelokar, Ms.CharusheelaGiri, Ms.DishaPardhi, Ms.MinakshiNinave
Singing	Winner (D.Pharm I)	Mr.TusharRamteke
	Runner (B.Pharm IV)	Ms.PayalDhande
Treasure Hunt	Winner (B.Pharm IV)	Ms.Esha Jain, Ms. Bhakti Kadu, Mr.HasanHussain, Mr. Krishna Thakrani, Mr.IndreshKhungar, Ms. Dolly Mukhi
	Runner (B.Pharm I)	Mr.Abhijeet Shinde, Mr.Chirag Moryani, Mr. Pratik Ambekar, Ms.Radha Kapgate, Ms.Ayushi Chaudhary and Ms.Rutuja Tijare
Debate	Winner (B.Pharm IV)	Ms. Himanshi Chaudhary
	Runner (B.Pharm II)	Mr.Sandesh Purohit
Quiz	Winner (B.Pharm IV)	Mr. Hasan Hussain, Mr. Krishna Thakrani, Ms. Suhasini Chaurasia
	Runner (B.Pharm I)	Mr. Abhijeet Shinde, Ms. Radha Kapgate, Mr. Prasad Narad
Rangoli	Winner (B.Pharm III)	Ms.Manali Barai
	Runner (M.Pharm II)	Ms.Shraddha Shahu
Mehandi	Winner (M.Pharm II)	Ms.Umme Hani
	Runner (B.Pharm IV)	Ms. Dolly Mukhi
Drawing	Winner (B.Pharm III)	Ms. Janhvi Parihar
	Runner (B.Pharm II)	Ms. Sharddha Shahu
Photography	Winner (M.Pharm I)	Mr. Shubham Gupta
	Runner (B.Pharm II)	Mrs. Sandesh Purohit

Seminar on 'Job Opportunities in Pharma Industry



Guest lecture on 'Self-Motivation for competitive examinations and higher education'

Guest lecture on topic 'Self-motivation for competitive examinations and higher education' was for the students of B. Pharm II and III year was organized on 30th Jan, 2019 in Sardarni Paramjeet Kaur Kalsi Auditorium of Gurunanak College of Pharmacy. Ms.ShrutkirtiFadnavis, from MIT, Pune delivered the lecture, Late Mr. D. P. Dharkar coordinated the event.

The training and placement cell, Gurunanak college of Pharmacy organized an interactive seminar for B. Pharm final year students on the topic 'Various job opportunities in the pharmaceutical industry 'by Dr. Roshan Palewar, Chief Business Officer, Dortmund Laboratories Pvt. Ltd., Mumbai and Founder of DocRosh Health Pvt. Ltd, Mumbai on 24th Dec, 2018.

In this seminar the special emphasis was given on the type of vacancies in various departments, industrial training and how to prepare for interviews by the students. The program was well received by the students and was coordinated by Dr. S. B. Waikar.

With reference of Dr. Palewar four students of GNCP have undergone one month industrial training at Dortmund Laboratories Pvt. Ltd., Mumbai.



Workshop on communication skills, personality development & interview skills



One day workshop on communication skills personality development and interview skills was conducted by Entrepreneurship development cell of GNCP on 31th Dec, 2018. A well-known orator Ms.Swaima Ahmad and Mr.RajendraDiwe, Editor, The Hitavada, Nagpur were the session speakers in this workshop.

According to Ms. Ahmad an effective communication consists of 7% words, 36% voice and 57% Body language. She divided the body into legs, torso, hand, face, smile, eye contact and facial expressions and told us how they affect your communication.

A short briefing on'prerequisites' and 'how to dress for the interview' along with 'How to prepare your Resume' was given by her.

Mr.RajendraDiwe guided the students about the importance of communication skills and how it should be inculcated right from the student life to your professional work life and how it differentiates you from the other. A brief session was conducted by Mr.Diwe on personality development has how important it is when you enter the industry, and told us now is the right time to build your personality, and told us to do Smart work instead of hard work.In Industry how the communications can be done and its importance was elaborated by him with various examples.The importance of behaviour, mannerism and ready to learn attitude is of utmost importance and he explained how it helps in the professional growth of a person.

A conclusive session on interview skills was given in which he told the students on various aspects of the interviewee, how to prepare for it and crack it,

The students of GNCP well received the sessions in workshop and Mr. S. R. Manapure, Dr. M./ M. Bodhankar along with team of Entrepreneurship cell took efforts for the event.

National workshop on 'Regulatory Affairs as career Option'



Industry Institute partnership cell of Gurunanak College of Pharmacy, Nagpur, under Graduate Employment Training programme organized One day National workshop on "Regulatory Affairs as career in association with Zim Laboratories Ltd. Kalmeshwar on 6th March 2019.

To impart training to pharmacy students in addition to the curriculum to prepare them for working in pharmaceutical industry was the aim behind organising the workshop. The workshop was designed to fill the knowledge gap with respect to the requirements of industry for students willing to seek jobs as regulatory affairs personnel in the pharmaceutical industry. Experts in the field from pharmaceutical industry and regulatory agency were invited to guide the students.

Mr.PravinTople General Manager, Regulatory Affairs, Zim Laboratories Ltd., Kalmeshwar, Nagpur, Mr.PankajPachghare, Assistant Manager, Regulatory Affairs Division, Zim Laboratories Ltd., Mrs. Monica Dhawad, Drug Inspector, FDA, Nagpur were the expert speakers for the workshop. Hundred M.Pharm pharmacy students from pharmacy colleges in and around Nagpur actively participated in the workshop.

Dr. A.M. Ittadwar, Principal, Gurunanak College of Pharmacy, Nagpur was the convener of the workshop which was organised and coordinated by Dr. V.A. Kilor and Dr. N.P Sapkal. Dr. G.K. Lohiya, Mr. K.B. Bhelkar, Mr. D.P. Dharkar, Mrs. S.A. Ubgade wholeheartedly worked for the successful conduction of the workshop along with student volunteers.

Industrial Training at Ganson's Private Ltd., Thane

Training and Placement cell, Gurunanak college of Pharmacy have arranged an industrial training for the students of B. Pharm III Year at Ganson,s Private Ltd, Thane

EDUCATIONAL TOURS

Educational Tour to Goa



An educational tour to Goa and industrial visit was organized for the students on 30^{th} Jan -6^{th} Feb. 2019.

In this tour students visited various scenic places in Mumbai, Goa and Karnataka like Nariman Point, Gate way of India and Siddhivinayak Temple in Mumbai, Calangute Beach, Baga Beach, Aguada Fort, Mangeshi Temple, Old Goa Church, Colva Beach, Dona Paula Beach, Miramar Beach, Anjuna Beach, Vagator Beach in Goa and DoodhSagar Waterfall in Karnataka. Students enjoyed various cultural function along with cruise ride in the river Mandavi at Panaji.

In this tour students visited Pfizer Pharma Ltd., Verna Goa which is the production unit of oral and topical solid and semisolid formulations.

In this 75 students of B. Pharm were escorted by the faculty members Mr. G. A. Gurunani, Dr.SheelpriyaWalde and Mrs. M. K. Bhurchandi.

Educational Visit to Aura Park



One day educational visit was organized to the Aura Park, Katlabodi, Amravati Road, Nagpur for the students of B. Pharm I year on 23rd Jan, 2019. In this event Mr.AmbarishGhatate and Mr.MukundSherekar shared the information about various medicinal plants (Traditional and Ayurvedic) and biodiversity with the students. 36 students under the guidance of Dr. S. B. Waikar and Mrs. S. A. Ubgade enjoyed the visit

Personality Development Tour to Odisha and Sikkim



Personality development tour to Odisha and Sikkim was organized on 31st Dec, 2019 to 11th Feb, 2019 for M. Pharm students. In this tour students visited various places in the state of Odisha including Jagannath Temple, and Golden Beach at Puri, Sun Temple at Konark, Pipili Village, Lingraj Temple, Nandankanan Zoological Park, Udaygiri and Khandgiri Caves at Bhubaneshwar. Students also visited various places in Sikkim and West Bengal including Deolo Hills and MangalDhamPranami Temple at Kalimpong (West Bengal), Wishing Lake and Sky Walk at Pelling, TathagataTsal (Buddha Park) at Revangala, Ganesh Tok and Gonjang Monastery at Gangtok, Snow Point on Lachung – Yumthang Road and Char Dham at Namchi.

Students also visited the formulation plant of Alkem Laboratories Pvt. Ltd, Kumrek, Sikkim. A group of 25 students of M. Pharm was accompanied by Mr. K. B. Bhelkar and Dr. V. V. Kale.

Industrial Visit to Oniosome Healthcare Pvt. Ltd., Mohali



Training and placement cell, Gurunanak College of Pharmacy arranged one day industrial visit followed by training was arranged for the students of B. Pharm III Yr on 14th of May, 2019 to OniosomeHealthcare Pvt. Ltd., Mohali. In this students received training and handled various sophisticated analytical instruments. Students also visited National Institute of Pharmaceutical Education and Research, Mohali. 18 students participated in this event. Dr. V. V. Kale and Dr. S. B. Waikar took efforts and coordinated the industrial visit.

(Photo Courtesy: Mr.PunitVerma, B. Pharm III Yr.)

Hospital visit to Ashwini Kidney and Dialysis Center



Hospital visit for the students of M. Pharm was arranged on _____ to Ashwini Kidney and Dialysis Center situated at Dhantoli, Nagpur. In this visit students gained the first hand information about the patients undergoing dialysis and understood the pharmacists' role in clinical practice or hospital set up. The outcome of the visit was students could understand the line of treatment, psycheof the patient, type of medication prescribed the diet plan and analysis of pathophysiological readings of pre and post dialysis.

Technical Article by Student

Inappropriate Antibiotic Prescribing: Hazards and Way Outs

Ms. Yogita D. Nikure
B. Pharm IV Year

Magic bullets named antibiotics are the chemical substances obtained from biotechnological source used for treatment of bacterial and fungal infections. They either kills the microorganism of restrict their growth. More important is these agents are ineffective against the viral infections such as cold, flu, and most coughs.

The name magic bullets itself indicates the importance of the antibiotic. It is said that 20th century was of infections and this problem was mainly solved by these magic bullets. Antibiotics can save lives when used properly. The first antibiotic discovered was penicillin. Penicillin-based antibiotics, such as ampicillin, amoxicillin, and penicillin G, are still available to treat a variety of infections and have been around for a long time. Several other types of modern antibiotics are also available, and they are usually only available with a prescription in most countries. Topical antibiotics may be available in over-the-counter creams and ointments.

Antibiotics are a powerful germ-fighting tool when used carefully and safely. But it's Overuse has led to antibacterial resistance. Bacteria adapt over time and become "super bacteria" or "superbugs." They change so that antibiotics no longer work on them. They pose a big threat, because there aren't any medicines to kill them. It is a growing problem. The Centers for Disease Control and Prevention (CDC) calls it "one of the world's most pressing public health problems." It's especially a concern in low-income and developing countries.

Increased antimicrobial resistance is the cause of severe infections, complications, longer hospital stays and increased mortality. For example just one organism i.e. methicillin-resistant Staphylococcus aureus (MRSA), kills more Americans every year than emphysema, HIV/AIDS, Parkinson's disease and homicide combined

A recent report from the World Health Organization (WHO) clearly states that this is not a phenomenon occurring in just poor or developing countries; the problem of **Antimicrobial** resistance (**AMR**) is now found throughout the world. In the context of few innovative or new antibiotics in the drug development pipeline, the WHO describes a future of a post-antibiotic world and warns that not only will this eliminate the advances in healthcare made over the past 100 years, which have ensured longer life in most parts of the developed and developing worlds, but it may also result in simple infections becoming unmanageable and potentially fatal. The United Kingdom Chief Medical Officer has highlighted the need for clinicians to preserve the effectiveness of antibiotics by giving clear evidence-based guidance on their appropriate use and has stated that we are losing the battle against infectious diseases, and antibiotics may no longer be effective in the long term.

Apart from spreading resistance, antibiotic overprescribing is also associated with other problems (see below). Consumption of antibiotics puts patients at risk of adverse effects.

Antibiotics account for approximately 20% of all drug-related emergency department visits in the United States. Although nearly 80% of these visits are attributable to allergic reactions, certain commonly prescribed antibiotics contribute to conditions that range from gastrointestinal to neurologic and psychiatric disorders. Most of these adverse effects are mild, but some life-threatening adverse effects have been reported, such as hepatotoxicity due to amoxicillin and clavulanate

Risks that have been shown to be associated with overuse of antibiotics:

- Increase of antimicrobial resistance
- Increase of more severe diseases
- Increase of the length of disease
- Increase of the risk of complications
- Increase of the mortality rate
- Increase of healthcare costs
- Increase of the risk of adverse effects, some being life-threatening
- Increase of re-attendance due to infectious diseases
- Increased medicalization of self-limiting infectious conditions

Possible ways to minimize adverse effect of antibiotics are:

- Prescribing fewer antibiotics is needed
- -Enforcement of governmental laws prohibiting over-the-counter sale of antibiotics
- -Antimicrobial stewardship programmes, campaigns and audits
- -More evidence from pragmatic studies carried out in primary care is required
- Promoting the use of valid point-of-care tests
- -Promoting delayed prescribing of antibiotics
- -Enhancing communication skills with patients

In short there is no reason to explain why antibiotic prescribed, Doctors have to do well and not harm, while respecting the ethical principles of autonomy and justice. We know that we can reduce antibiotic prescribing in many of the infections that are currently unnecessarily treated without compromising our patients' health. By accomplishing this, we will do less harm.

RESEARCH & DEVELOPMENT ACTIVITIES

Publications

- Mrs.Shobha A. Ubgade authored a Chapter on the topic "Nanosuspensions as nanomedicine: Current status and Future Prospect" published in the book entitled "Medicinal Chemistry with Pharmaceutical Product Development" edited by DebarshiKarMahapatra and Sanjay Kumar Bharti; published by Apple Academic Press, (CRC Press, Taylor and Francis group) Toronto; February 2019; Ch. No. 4, pp 105-154. Coauthors Dr. Vaishali Kilor, Dr. Abhay Ittadwar and Mr. Alok Ubgade
- A.N. Mungle, A.M. Ittadwarand D.N. Begde. Natural alternatives to treat cancer: a study on anticancer activity of *lawsoniainermislinn*. International Journal of Pharmaceutical Sciences and Research 2019; 10(2): 869-874.
- S.R. Dudhakohar and S.R. Walde. Phyto-Chemical extraction and anti-microbial activity of *Selaginellabryopteris*. World Journal of Pharmacy and Pharmaceutical Sciences 2018; 7(11): 1670-1675.
- Nidhi Sapkal, MangeshGawande, MinalBonde, Anwar Daud; Studies on effect of formulation and processing parameters on stability of KetorolacTromethomine Orally Dissolving Films; International Journal of Applied Pharmaceutics; 2019;11(4)
- ShobhaUbgade*, Vaishali Kilor, Vidya Bahekar, Abhay Ittadwar, Formulation development of immediate release pellets of Tadalafil:Solidification approach for nanosuspension, Int. J. App. Pharm., Vol 11, Issue 4, 2019, 124-131
- **PoojaHemane***, **Vinita Kale** and **TirupatiRasala**; Formulation and evaluation of antiseptic film forming liquid for skin injury; European journal of pharmaceutical and medical research; 2019,6(4), 381-386

• R. RachanaDevendra, M.V. Sharma, S.R. Walde, K.A. Tawalare and A.Y. Gotmare. Effect of sanjeevanivati an ayurvedic medicine in typhoid fever - a clinical study. European Journal of Pharmaceutical and Medical Research 2019; 6(8): 341-346.

. Guest Lecture Delivered/ Resource Person

- **Dr. N. P. Sapkal** delivered a guest lecture on topic 'Terahertz spectroscopy: A novel tool for analysis'.in DTE sponsored QIP program on 30thJan, 2019 at Government College of Pharmacy, Amravati
- **Dr. N. P. Sapkal** delivered a guest lecture on 'Oral thin films: an innovative dosage form' on 20thFebruary, 2019 in NESE workshop at Global R&D meet of Sanofi held at Goa Development Centre. **Seminar/workshop/SDP/QIP/Training program attended**
- Dr. A. M. Ittadwar, Dr. S. R. Walde, Dr. M. M. Bodhankar, Mr. T. M. Rasala and Dr. S. K. Arora attended 4thDr. A. k. Dorle Memorial Lecture Series 2019 organized by UDPS Nagpur Alumni Association and Pharmacy Student Association, Department of Pharmaceutical Sciences, Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur and Dr. A. K. Dorle Memorial Trust held on 25th Mar, 2019
- **Dr. S. R. Walde** participated at Zonal Scientific Conclave. 'Nutricon 2018' organized by Nutrition Society of India, Nagpur Chapter, and Department of Pharmaceutical Sciences, RTM Nagpur University, Nagpur held on 9th Dec, 2018
- Mr. K. S. Moharir and Dr. S. K. Arora attended AICTE Sponsored two weeks Faculty Development Program (FDP) on "Optimization Techniques and Recent Advances in Drug Delivery System" held on 10 22 June 2019 at ISF College of Pharmacy, Moga, Punjab.

News from Entrepreneur Development (ED) Cell:





SubramaniRamachandrappa CMD,RichcoreLifesciences | M Partner, Vivnova Ventures | Bengaluru, Karnataka, India

Inspired by KiranMazumdar Shaw, with whom he worked in 1999, this textiles engineer decided to tap the emerging opportunities in biotechnology. In 2001, he started RichcoreLifesciences, which was a huge step for SubramaniRamachandrappa, whose father was a daily wage-earner who saved enough to set up a small silk factory. But it was at ISB, which he joined on an impulse during his trip to Hyderabad, that he learnt to think big and think globally. "Before ISB, I was local in my vision, and was not looking beyond making two ends meet."

Today, he has inked an agreement with Avendus, a dealmaker in the life sciences sector, and is focused on "developing new enzymes and patenting them". His firm is looking at breakthroughs that include reducing the use of foodgrain in animal feed and using bagasse as a substitute. Other new products help increase milk yields by 15 per cent and treat effluents more efficiently. "It is easy to have ideas," says Ramachandrappa, "but difficult to make them work. Even if a few ideas of ours work, we could reach the sky"

Subramani leads the innovation efforts at Richcore, developing novel recombinant proteins and enzymes which are targeted to conserve food, water, energy and health. Subbu is an Engineer and MBA from ISB (Indian School of Business a Kellogg, Wharton & LBS program) actively contributes towards entrepreneurship development and innovation as a speaker and panellist in forums across several countries. He could have given up on life. Instead, he struggled for years on end, borrowed (and returned) money and took risks that almost made him poorer. Creditors were snapping at his heels for a large part of his adult life. It all started when SubramaniRamachandrappa's father was pushed to suicide after the family business went bankrupt.

The venture left them countless legal hassles. Debts also loomed large and Subramani, then a textile engineering student, recalls going to court in between his lectures to fight cases filed against him by

creditors. "I was scared," he recalls, "I didn't know what was going to hit me next and I had a large family to support. Thus, I started doing odd jobs to pay the bills.

After graduating in 1998, Ramachandrappa's decision to become entrepreneur was based on the assumption that a business would help pay off debts faster than a job. His event management company (started in 1999) almost took off, but he was forced to abandon it because it was a 'side business'. Meanwhile, financial troubles at home kept mounting. Around this time, the Pharma business captivated his imagination and he started working at Biocon. But although it was a 'fun time', it still didn't pay the bills. Post-Biocon, he worked with a family-run business as a consultant for a while, where he picked up valuable knowledge about financial management. In 2001, Subramani began RichcorePharma with two clients- Biocon and Mohan Breweries. "It was a little bit of luck, with a lot of effort."

However, his company, which he started with only his wife (then his fiancée) and sister in law, is today a multi-million dollar entity manufacturing enzyme products for various industries. He has big dreams for his business, "Even today, everything I make is either reinvested in the business or paid back to creditors. But workwise, we have a lot of plans. We want to change the world, and we're trying to figure out how."



HOMAGE

Mr. Devavrata P. Dharkar 22/01/1982 09/03/2019

Staff, students, parents and management missed their heartbeat when they knew a great loss of Gurunanak College of Pharmacy, as one of its dedicated faculty member, favourite among all students Mr.DevavrataPramodDharkar left for his heavenly abode.Mr.DevavrataDharkar joined this organization just after passing his M. Pharm in Pharmaceutical Chemistry in 2005 and since then was working and continuously trying for upliftment of this organization till his last breath.

DevavrataDharkarSir had an emotional connection, a sensitivity and sensibility to each and every individual whoever crossed his path. An intellect that surpassed beyond measure, sir could remember all the alumnies, their names and characters, anytime of the day. A gentleman of strong characters, he was always respectful to everyone and very loving to the younger lots.

Lately he had developed an utmost interest in the historical aspects of his very own Nagpur. Followed by lacks of people on facebook, he used this very platform of social media to introduce himself to the existing Maharajas and Maharanis of erstwhile Nagpur. He took all the pains to go and meet them and hear all the nits and bits of Nagpur's bygone era. It was with lots of positivity which he shared with all his colleagues next day with a parting word that 'I will be publishing a book on history of Nagpur one day"

Gurunanak family pays a heartfelt homage to this unique personality and will remember him always.



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