



भैषजिक समाचार@DPSRU

Newsletter

of

Delhi Pharmaceutical Sciences and Research University

(Established Under Act 07 of 2008, Govt. of NCT of Delhi)

M.B. Road, Pushp Vihar, Sector 3, New Delhi - 110017

Progress in fight against COVID-19

In This Issue

- New Product Development and Research Initiatives
- Research Projects Submitted
- Publications by Faculty
- Public Service and Awareness programs
- Community Services
- University in News Headlines
- Events conducted at University
- Activities by Cultural Societies & Clubs of University
- Students' Accolades in varied fields

“ A Message from Vice Chancellor's Desk



For decades the period of May to August has been together for examinations, vacations and admissions. All these processes produce rejuvenation to everyone. This period adds excitement looking at faces of new students. Administrators plan to prepare vision for ensuing new academic session.

The COVID era was expected to get reduced by August and there was a hope for returning to normalcy. Instead of returning of normal times, “New Normal” started during this era. I will rather refrain even today to define the recent time as “Post COVID Era”.

The profession of pharmacy has some unique responsibilities. Though as a pharmacist they are not allowed directly to see the patients and remain in hospitals however, nothing can work without a pharmacist in hospital. May it be drug, nutraceutical, medical device, diagnostics or even in community the “Masks” and PPE in the hospitals.

Our staff members took great challenges. First, to adopt “online teaching” then “Online assessments” and finally “Online examinations”. Being offline on campus, got to know online admission process also. Most exciting thing has been to contribute to the humanity by providing needs of masks, sanitizers, medicines and even “decoction Kadha” for the prevention as well as treatment of patients of COVID. In public, staff members got involved to disseminate knowledge through webinars.

My heartfelt blessings and gratitude to my colleagues. I welcome Dr. O.P Shukla who has recently joined as Registrar, DPSRU. I am sure with his joining our University will achieve greater heights because he will provide the much needed “Exclusive Administrative” support.

We also welcome and congratulate Chairman, Board of Governance, Prof. Shridhar Dwivedi to get second term as the Chairman.

Prof. Ramesh K Goyal
Vice Chancellor, DPSRU

If your actions inspire others to dream more, learn more, do more and become more, you are a leader.

-John Quincy Adams

“ A Message from Registrar's Desk



I feel very fortunate to have become a part of Delhi Pharmaceutical Sciences and Research University, looking at the unwavering enthusiasm and support from the Vice-chancellor. I look forward to encourage the teamwork and reflect on our successes through this newsletter. Each one of our faculty and staff members has the right to be proud of their work during these times of unprecedented crisis brought on humanity by COVID-19. The energy, dedication and focus that I feel in faculty and staff members in fighting against this pandemic through their research initiatives and public service activities exemplify the university's commitment to this community. They did not allow

any constraint to hamper their pursuit of research and social outreach. It reflects who we are, what we are and where we are.

I feel pleasure that our university is an important instrument of transformation for India and is committed to the ideals of public higher education.

I commit to do all that I can, to take this university to the heights where we can nourish humanity with a hope to build a better world.

Dr. O. P. Shukla
Registrar, DPSRU

Leader become great not because of their power but, because of their ability to empower others

-John Maxwell



Innovation: The only way to win over COVID-19

New Product Development at DPSR University.

Herbal formulation against COVID-19 based on *Solanum nigrum*

In DPSRU, early lab studies have offered hope for plant-based drugs to treat coronavirus. A team of pharmacologists and researchers in search of plant compounds that could help with COVID-19 treatment has found an edible weed that showed promise in lab studies, under the guidance of Prof. Ramesh K. Goyal. Researchers from Delhi Pharmaceutical Sciences and Research University found it in Delhi's Aravalli Biodiversity Park, which they have been visiting since March. In molecular docking studies conducted recently, *Solanum nigrum* (black nightshade; Makoy in Hindi), a weed and a vegetable commonly consumed in many parts of the country, the team says they found remarkable results. Their research showed its constituents bind with ACE 2 (an enzyme the Sars-Cov-2 virus uses to enter the body) and have the potential to inhibit viral replication; cytokine storm and inflammation. Professor CR Babu (Professor Emeritus, Delhi University) who developed the Aravalli Biodiversity Park has guided them through the park and helped the team to collect samples from eight potential plants. Based on the first 206 Covid-19 deaths reported in India till April 10, Prof. Goyal & team published a paper in Elsevier's Diabetes Research and Clinical Practice journal which concluded, what is now well known, that patients with cardiovascular diseases, diabetes mellitus and hypertension are at greater risk of developing Covid-19 infection. The team tried to understand the clinical characteristics of Covid-19 with the renin angiotensin system (RAS), hormonal system that regulates blood pressure.

In drug discovery, one of the mechanisms used is to see how the chemical compound interacts with the body through molecular modelling studies. The score from modelling gives them an idea of how the drug will perform. By the end of April 2020, it was very clear that Covid-19 has close molecular links with angiotensin converting enzyme-2 (ACE2) (an enzyme the Sars-Cov-2 virus uses to enter the body) and Open Reading Frame protein (ORF8)—a serological marker. ACE-2 in particular, seems to be the main culprit for every complication of the patient like cytokine surge,

inflammation and thrombotic events. Unfortunately, even today, no drug that inhibits ACE2 is available. The team including Prof. Ramesh K. Goyal, Dr. Jaseela Majeed, Dr. Mahaveer Dhobi, Prof. Rajiv Tonk, Dr. Ajit Kumar Thakur found that some constituents of black nightshade interact with ACE2 and its associated receptors. The docking scores for the compounds present in *Solanum nigrum* were higher than some repurposed drugs being used currently and also when compared with other phytochemicals under clinical trials.

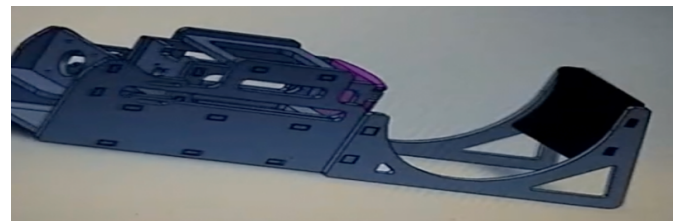
Based on some preliminary clinical evidence, results of which are still being compiled, the drug once developed could be useful for symptomatic patients unlike other plant-based interventions which are prophylactic in nature. The team's initial research results will be available in Reviews in Cardiovascular Medicine journal soon. The University team has prepared a formulation for the clinical trial permission and are in the process to get the support from various statutory and funding agencies.

Alcohol-based Hand Sanitizer

Alcohol-based Hand Sanitizer has been developed by Holycon Innovation Pvt. Ltd. (incubated at DPSRU Innovation Incubation Foundation) in West Bengal with the names of "Immosan". Till now more than 15000 units are supplied in West Bengal.

Low-Cost Ventilator

It has been developed by Mechagen Robotics Pvt. Ltd. (incubated at DPSRU Innovation Incubation Foundation). They are working tirelessly in Designing Low-Cost Ventilators under the Guidance of Doctors to Support our Medical Fraternity.



N95 & N99 Masks

These are developed by Evol Medline Pvt. Ltd. (incubated at DPSRU Innovation Incubation Foundation). They are manufacturing & supplying Masks in this Pandemic of COVID-19.

Research is formalized curiosity. It is poking and prying with a purpose.

-Zora Neale

“ Innovation: The only way to win over COVID-19

New Product Development at DPSR University

Surface Disinfectant & Hand Wash (HOCL)

A Surface Disinfectant & a Hand Wash (HOCL) has been developed by Brajkush Industries Pvt. Ltd at DPSRU Innovation and Incubation Foundation. The USPs of the developed product are: No Harmful chemicals, No Harsh Fumes, No Chemical Residue, 100% Natural Ingredients; Just Salt and Water, replicates how people and animals kill germs naturally, Spray Anywhere, Zero Toxicity; use around anyone, No first air warnings whatsoever. This start-up is also providing the facility of Tunnel along with HOCL based Disinfectant & Hand Wash.



Isopropyl based Sanitizer

Isopropyl alcohol along with Aloe Vera were used to prepare a sanitizer. Further the prepared formulation was converted into gel form with carbopol gelling agent for better applicability. This formulation was developed by Ms. Shagun (M. Pharm.) Research Scholar under the guidance of Prof. Harvinder Popli.

Aloe-Vera based Hand Sanitizer

Aloe Vera is a moisturizer that could stop your skin drying out. That's useful since cracks in the skin can increase the risk of bacterial infection. The main active

ingredient in this sanitizer is isopropyl alcohol (isopropanol). It was developed with the name of Aoesan as per WHO guidelines by Dept. of Pharmaceutical Chemistry under the guidance of Prof. Rajiv Kumar Tonk. Other contributors for the development of the sanitizer were: Mr. Vivek, Mr. Jurnal, Mr. Gautam, Dr. Jaseela Majeed and Dr. J Swaminathan.



Alum and Ethanol-based Hand Sanitizer

Potassium alum is considered by the FDA as generally recognized as safe (GRAS) substance. The main functions of potassium alum in drugs are as an astringent, antiseptic, or adjuvant agent. The astringent action is performed by the induction of coagulation in the superficial tissue layers until the formation of a crust. The formation of alum ions neutralizes the charges on plasma proteins, causing the blood to coagulate. A similar effect is observed in disinfectants where these ions react with the free organic acid and thiol groups of proteins on microbes and free proteins, resulting in protein precipitation. So, by using alum and ethanol, hand sanitizer was prepared under the guidance of Prof. Ramesh K. Goyal and Prof. Geeta Aggarwal

Ongoing Research Work

Screening of phytoconstituents belonging to traditional medicinal plants for COVID-19

Dr. Pandita, Dr. Gaurav and team are presently involved in the screening of phytoconstituents belonging to traditional medicinal plants for COVID-19, using a two-pronged approach i.e. firstly, blocking the viral entry through ACE2 receptors and secondly, inhibition of viral

replication by inhibiting the viral enzymes, like 3CLpro, PLpro, RdRP.

Herbal based nasal formulation to prevent entry of microbes through nose

Prof. Ramesh K. Goyal and Dr. Geeta Aggarwal are presently involved in formulating a herbal-based, stable, cost-effective, and antimicrobial nasal formulation, which can prevent the entry of microbes through the nose.

Success is not final, failure is not fatal: it is the courage to continue that counts.”

- Winston Churchill

“No Research Without Action, No Action Without Research!”

Research Projects Undertaken by DPSR University

1. Development of a Phytopharmaceutical drug formulation of *Solanum nigrum* L. for the treatment of COVID-19

Funding Agency: BIRAC

Team Members: Prof. Ramesh K. Goyal (PI), Dr. Mahaveer Dhobi (Co-PI), Dr. Jaseela Majeed (Co-PI), Prof. Rajiv Kumar Tonk (Co-PI), Dr. Ajit Kumar Thakur (Co-PI).

This project was submitted under the call for proposals on “Anti- SARS-CoV-2 /nCoV-2 Virus Studies using Botanical Ingredients and Traditional Formulations”. Under the project, it is proposed to develop an herbal formulation and validate its pharmacological activities, including anti-viral, anti-inflammatory, and immunomodulatory properties. The plant *Solanum nigrum* was selected based on preliminary work carried out by molecular docking of phytoconstituents of plant and literature reported in various in Ayurvedic books. The team found this plant might be the most effective in COVID-19. Its phytoconstituents may have antiviral activity against SARS-CoV-2. Also, it may be effective against associated comorbidities, including respiratory failure and cardiovascular complications.

2. Phytochemical and Pharmacological investigation of Indian medicinal plants for the management of SARS-CoV-2 /nCoV-2 Virus: An Immunological Approach

Funding Agency: BIRAC

Team Members: Dr. Ajay Sharma (PI), Dr. Harvinder Popli (Co-PI), Dr. Saurabh Dahiya (Co-PI)

Some traditional medicines appear to be effective in treating viral infection by enhancing the immunity of the body against the virus, reducing the secretion of pro-inflammatory cytokines. The clinical trials suggest the possibility to obtain natural products to treat viral infections and their complications from traditional medicinal plants. The herbal extracts from selected Indian medicinal plants such as *Withania somnifera*, *Ocimum sanctum*, *Tinosporacordifolia*, *Andrographispaniculata*, *Cinnamomumzeylanicum*, *Zinziberofficin-ale*, and *Glycyrrhizaglabra* are included in Ayurvedic system of medicine and their claims in boosting immunity as well as reducing inflammation are reported well. The traditional claims of these drugs

need to be proven scientifically in the management of COVID-19 where immunological and inflammatory mechanisms are compromised.

Therefore, this study is designed to investigate the effectiveness of standardized extracts of selected Indian medicinal plants in the management of COVID-19. Moreover, their anti-inflammatory and immunological mechanisms will be determined to alleviate the symptoms of COVID-19 in immune-compromised patients.

3. Formulation and Evaluation of Polyherbal Nanoparticles for Preventive and Curative Management of COVID-19

Funding Agency: BIRAC

Team Members: Dr. Madhu Gupta (PI), Dr. Ajay Sharma (Co-PI), Dr. Harvinder Popli (Co-PI), Dr. Saurabh Dahiya (Co-PI)

Nanotechnology-based on chitosan polysaccharide, having the ability to encapsulate any drug small molecules or biologics – for localized delivery and sustained release, to generate intra-pulmonary drug delivery formulations suitable for treating COVID-19 patients. Chitosan nanoparticles are fully biocompatible and strong adherence property to lung epithelial tissues and ensure sustained release, without systemic distribution.

There are several mechanisms investigated for SARS-CoV-2 disease mechanisms, however, lungs are the place where the infection and the resulting inflammatory response cause tissue damage with dire consequences. Hence, it is a place where an effective localized treatment may become a lifesaver. These nanoparticles could be used to control and reduce the effects of this uncontrolled inflammation.

Indian medicinal herbs are a rich source for the treatment of numerous diseases. After employing for identification and proper assessment of the therapeutic potential of these phytoconstituent, it will not be a miracle that the team could alleviate this worldwide pandemic infection. The Ayurveda has also suggested various natural ways of boosting immunity that plays a very important role in susceptibility and complications due to the novel coronavirus. Several medicinal plants presented their antiviral effects by acting on the various

In much of society, research means to investigate something you do not know or understand.

- Neil Armstrong

“ Publications: The Goal of Scientific Research

stages of viral growth. Phytoconstituent based pharmacologically effective novel formulations focused on major contributions for viral infections. Based on suitability, availability, efficiency, and rapid bioassay systems, such antiviral compounds have been considered for rapid screening from plant extracts and fractions. Previous research suggested that medicinal plants are lifesaving drugs and provide the basic natural materials for the development of suitable drugs as compared to synthetic drugs. Research on particular medicinal plants might be a suitable option to promote their usage in clinical aspects to treat COVID-19 would emerge as a source of light to overcome this fatal infection.

There is considerable evidence that phytochemical having immune-modulatory and anti-inflammatory potential might have the capacity to alleviate the symptoms of COVID-19. Also, the team emphasized the nanoparticles of polyherbal drugs (such as Tulsi, Giloy, and Ashwagandha) that will ensure the targeted and controlled drug delivery and minimize their side effects. It is a remarkable effort to extract bioactive principle with a confirmed antiviral activity that leads to exploring their mechanism of action and, lastly, to develop novel nanoparticles using polyherbal drugs that not only controls viral infections but also reduces the associated complications.

4. Effect of Yoga with Physiotherapy for the treatment of non-specific chronic skeletal muscle spasm in the light of possible involvement of pyroptosis

Prof. Ramesh K. Goyal and Dr. Shilpa Jain submitted a project entitled "Effect of Yoga with Physiotherapy for the treatment of non-specific chronic skeletal muscle spasm in the light of possible involvement of pyroptosis", in DST with Project ID 50689 in April' 2020.

5. Development of Nanotherapeutic Systems for siRNA-Based SARS-CoV-2 Inhibition

Agency: DST

Team Members: Prof. Deepti Pandita (PI), Prof. Harvinder Popli (Co-PI), Prof. Viney Lather (Co-PI), Dr. Gaurav Kumar Jain, Dr. Manoj Garg.

Despite the global efforts in using repurposed drugs,

the challenges are still lying in proving their efficacies in mitigation of SARS-CoV-2 related COVID-19. Gene silencing using small interfering RNA (siRNA), a double-stranded interfering RNA has been used as an effective solution in diseases like cancer, macular degeneration, HIV, Hepatitis C, Ebola, respiratory syncytial viral infections, etc. and could prove an effective strategy in blocking the SARS-CoV-2 replication and thus management of COVID-19. siRNAs based therapeutics were used effectively earlier in the SARS and Middle East Respiratory Syndrome (MERS) making a strong base for using this technology in SARS-CoV-2. The proposed project has been planned to develop a nanotherapeutic system for delivery of in-house designed siRNAs as gene silencers targeting either the mRNA for SARS-CoV-2 spike proteins or viral replicase/RNA polymerase region and thus blocking the viral entry or its replication.

6. Establishment of DPSRU Centre for Advanced Formulation Technology under Common Research and Technology Development Hubs (CRTDH) -DSIR scheme

Agency: DSIR

Team Members: Prof. Ramesh K. Goyal, Dr. Gaurav Kumar Jain, Prof. Deepti Pandita, Prof. Geeta Aggarwal, Prof. Harvinder Popli, Dr. Meenakshi Chauhan

The successful translation of advanced formulation technology requires effective coordination and exchange of information and collaboration between academic institutions, universities, and industry and a very clear understanding of regulatory pathways which is the need of the hour for these innovations. Thus, to maneuver translation of advanced and innovative healthcare formulations the team proposed "DPSRU-Centre for Advanced Formulation Technology (CAFT)". The specific objectives are:

- To accelerate R&D of advance and innovative healthcare solutions through integration of nanotechnology, molecular, preclinical, and clinical testing, thus making interventions more affordable, safe, and effective.

Research is about engaging in a conversation with a brand

- Matthew Rhodes

“No Research Without Action, No Action Without Research!”

- To set up core translational facilities and infrastructure for advanced product development accessible for MSME culture, start-ups, research institutes/ universities, and individuals.
- To support and cater to the research, development, and testing needs of Healthcare MSME culture, start-ups, research institutes/ universities, and individuals and to provide them a unique platform to validate their proof of concepts to scale-ups and ultimately commercially viable sustainable solutions.
- To develop state-of-art preclinical animal imaging facility that will assist in understanding in vivo molecular interaction and fate of advanced formulations.
- To develop a one-stop solution for translation (bench to bedside) of advanced healthcare formulation and products.
- To train people in the advanced formulation development technology to serve the needs of development in these areas and to develop affordable healthcare products through novel processes and technologies.

In line with the government's vision of affordable and accessible healthcare for all, CAFT could act as a foundation for synergistic research and could lead to breakthroughs in affordable healthcare products.

7. Setting up of COVID-19 Diagnosis, Research and Surveillance Facility

Agency: Small Industries Development Bank of India and Rotary Club

Team Members: Prof. Ramesh K. Goyal, Dr. Gaurav Kumar Jain, Prof. Harvinder Popli, Dr. Mukesh Nandave
The team proposes to establish COVID-19 diagnosis, research, and surveillance facility at DPSR University with the objective (a) To facilitate pandemic diagnosis and research needs and (b) To facilitate immediate testing needs of DPSR students, staff, faculty and nearby population.

Projects other than COVID 19

Simulation of good nebulization practices by Y-scintigraphy

Agency: Acires Lab Limited

Team Members: Dr. Gaurav Kumar Jain

Concept Note: A study to investigate the dispersion and deposition pattern of exhaled droplets during the

nebulization process using scintigraphy. The aim is to observe the effect of nebulization process on dispersion and deposition pattern of the radiolabelled exhaled droplets (imitating coronavirus infected droplets) generated by human subjects (a) normal condition, and (b) artificially induced sneezing; and to evaluate the effect of the use of (a) nebulization mask, (b) nebulization mask with filters and (b) nebulization filter combined with face shield. Another aim of the study is to evaluate the influence of the nebulization process on the dispersal of coronavirus and to generate a link between nebulized treatment and an increased risk of SARS-CoV-2 infection if any.

Publications related to COVID-19

- **Goyal RK, Majeed J, Tonk R, Dhobi M, Patel B, Sharma K, Apparsundaram S.** Challenges in the development of a New Drug for COVID19: Current targets and drug candidates. Reviews in Cardiovascular Medicine. (Under Review).
- **Majeed J, Ajmera P and Goyal RK.** Delineating clinical characteristics and comorbidities among 206 COVID-19 deceased patients in India: The emerging significance of renin-angiotensin system derangement. Diabetes Research and Clinical Practice. Vol 167 (2020) 108349.

Outline of the Article: The research article is a retrospective case series analysis of demographic and clinical data with associated comorbidities of the first 206 deaths reported in India up to 10th April 2020. The data was retrieved from the official release from the Ministry of Health and Family Welfare, Government of India. This was followed by literature search to correlate the available evidence for their possible relationship with the Renin-Angiotensin system (RAS). The article concludes that patients with cardiovascular diseases, diabetes mellitus, and hypertension are at greater risk for developing COVID-19 infection. There may be a derangement of the entire RAS after the attack of COVID-19 and hence, patients with these pre-existing comorbidities and on ACE inhibitors or angiotensin receptor blockers should be monitored carefully considering the role of RAS. The study presents a significant relevance in the pathogenesis and prognosis of COVID-19.

Research is the distance between an idea and a realization

- Devid Sarnoff

“ Publications: The Goal of Scientific Research

- **Ajmera P, Goyal RK, Yadav S, Mukhopadhyay D and Majeed J.** Overcoming the Pandemic: Analysing the ongoing challenges in the prevention of COVID-19 in India. *Journal of Health Management.* 2020 (Under review).
- **Majeed J, Chauhan C and Goyal RK.** Fight against COVID-19: Comparative Analysis of USA and India. *Indo Global Journal of Pharmaceutical Sciences (IGJPS).* 2020 (Under review) Manuscript Number: IGJPS-2020-MSA-0752.
- **Majeed J, Chauhan C and Goyal RK.** Tourism, A Causative Factor responsible for rampant increase of corona cases in the World. *Journal of Travel Research.* 2020 (Under review).
- **Goyal RK, Majeed J and Ajmera P.** Decoding the Wrath of Virus. *Double Helical.* 2020;6(4).
- **Musyumi P, Aggarwal G, Nagpal M, Goyal RK.** "A Case Study: Analysis of Patents of Coronaviruses and COVID-19 for Technology Assessment and Future Research" in *Curr Pharm Des.* 2020 Jul 20. Online ahead of printing
Outline of the Article: The aim of the present study is to map the research and development through patent analysis, in the field of Coronaviruses (CoV), particularly COVID-19 (2019-nCoV). To extract the results, Derwent Innovation database is used by a combination of different key-strings. Approximately 3800 patents were obtained and further scrutinized and analyzed. The present write-up also discusses the recent progress of patent applications in a period of the year 2010 to 2020 (present) along with the recent developments in India for the treatment options for CoV and 2019-nCoV. The findings and outcome of the study offer insights into future research and provide actionable information to facilitate policymakers, academia, research institutes and investors to make better evidence-based decisions for focused research in the field of treatment and prevention for coronaviruses and 2019-nCoV.
- **Yadav V, Reang J, Sharma V, Majeed J, Swaminathan J, Goyal RK and Tonk RK.** Repositioning of drugs an emerging strategy for urgent intervention of NCoV-19 infection. *Corona Virus.* 2020. (under review)
- **Goyal RK.** Herbal based treatments for Covid 19. 2020. *CV Network.* 19(2):15-16.
- **Goyal RK, Majeed J, Ajmera P, Yadav S and Dadhich A.** Assessment of cross-country variations of Covid-19 in terms of case fatality rates and usage of complementary and alternative medicine. *J. Ethnopharmacol.* 2020 (under Review).
- **Patel BM, Sharma S, Nair N, Majeed J, Goyal RK and Dhobi M.** Therapeutic opportunities of edible anti-viral plants for Covid-19. *Mol. Cell Biochem.* 2020 (under review).
- **Kaur M, Nagpal M and Aggarwal G.** Antiviral essential oils incorporated in nanocarriers: strategy for prevention from Covid-19 and future infectious pandemics. *Current Bioactive Compounds.* 2020 (Under Review)
- **Arora, A & Parle, A.** (2020) "Coronavirus Disease 2019 (COVID-19): A review." in *IJSET - International Journal of Innovative Science, Engineering & Technology*, 7(7), 135–153.
Outline of the Article: Existence of the human race has come into trouble due to the coronavirus disease 19 (COVID-19) which is a highly contagious viral infection caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). The virus initially emerged in Wuhan, China, and spread across the globe. Genomic analysis disclosed that SARS-CoV-2 is phylogenetically related to severe acute respiratory syndrome-like (SARS-like) bat viruses, therefore bats could be the possible primary reservoir. Though the point of origin and path of transmission is not known, human to human transmission is confirmed through analysis. Due to the spread of the disease in about 215 countries around the world, WHO has declared COVID-19 as a public health emergency of international concern. There is no clinically approved drug or vaccine available for COVID-19 to date. Scientists are in search of an effective and quick cure. Various clinical trials of different antiviral drugs, either alone or in combination with antibiotics, are being conducted worldwide. As the treatment is not available yet, prevention is the only strategy to combat the virus.
- **Rai R.** Prevalence of Diet and lifestyle factors among Patients with Corona Virus Infection with reference to Healthy Subjects. *Topics in Clinical Nutrition..* 2020. (Under Review)

“No Research Without Action, No Action Without Research!”

- **Kalra S**, Pal S, **Jain S**. COVID- 19 Pandemic: Mental Health and Coping Strategies-A review. Journal of Dclinical and Diagnostic Research. 2020 (Under review)
- **Kalra S**, Pawaria S, Pal S, Arora B, Rishi P. Physical Activity and Health Status of Individuals of NCR During Lockdown Due To COVID-19. Journal of Clinical and Diagnostic Research. 2020 (Under review).
- Das A, **Jain G.K**, Agarwal P, Khar RK, **Pandita D** and Lather V..Role of phytochemicals in management of COVID-19. Phytomedicine. 2020 (Under review).
- **Dhiman S**, **Sahu PK**, Reed WR, Ganesh GS, **Goyal RK** and **Jain S**. Impact of COVID-19 Outbreak on Mental Health and Perceived Strain among Caregivers Tending Children with Special Needs. Elsevier Editorial System (TM) for Research in Developmental Disabilities. 2020 (Under review).
- Raheja S, Girdhar A, **Jain GK**, **Popli H** Lather V and **Pandita D**. Potential therapeutic approaches in the management of COVID-19. Drug Development Research. 2020 (Under review)
- **Jain GK**, Khanna K, Korukonda K. Lung Scintigraphy to assess the role of Levosalbutamol on Mucociliary Clearance in Healthy and Asthmatic Subjects. International Journal of Scientific Research. 2020; 9(4); 1-3.
- Alharbi KS, Al-Abbasi FA, Agrawal GP, **Sharma A**, R. Kowti, I. Kazmi. Impact of COVID-19 on nephrology patients: A mechanistic outlook for the pathogenesis of acute kidney injury (Alternative Therapies, 26: 66-71, 2020).
- **Aggarwal G**, Nagpal G, Sharma A, Puri V, and Dhingra GA. Upcoming drifts in bio-similar. Current Clinical Pharmacology. 2020. (E-pub Ahead of Print).
- Bakshi H, Nagpal M, Singh M, Dhingra GA, and **Aggarwal G**. Propitious profile of Peppery Piperine. Current Molecular Pharmacology. 2020 (E-pub Ahead of Print).
- Bakshi H, Nagpal M, Singh M, Dhingra GA and **Aggarwal G**. Treatment of psoriasis: a comprehensive review of entire therapies. Curr Drug Saf. 2020;15(2):82-104
- Bisht R, Nirmal S, Agrawal R, **Jain GK**, Nirmal J. Injectable in-situ gel depot system for targeted delivery of biologics to the retina. Journal of Drug Targeting. 2020 (Accepted).
- **Pathak D**, **Manchanda S**. Pharmacosomes: A Novel Vesicular Drug Delivery System. International Journal of Innovative Science, Engineering & Technology. 7 (7),88-97.
- Dutt R, Malik KC, Karwa M, **Jain GK**. Development and Validation of UPLC-MS/MS Method for Rapid Simultaneous Determination of Levothyroxine and Liothyronine in Human Serum. Journal of Drug Delivery and Therapeutics. 2020 Jun 15;10(3-s):176-81.
- Raghuvanshi A, Khan UA., Parveen U, Gupta A, **Jain GK**. Development and validation of the UPLC-MS/MS method for the determination of aripiprazole in rat plasma using liquid-liquid extraction: pharmacokinetic and bioequivalence application. International Journal of Biology, Pharmacy and Allied Sciences. 2020 (Accepted)
- Sharma AK, Bhatia S, Al-Harrasi A, **Nandave M**, Hagar H. Crosstalk between GSK-3 β -actuated molecular cascades and myocardial physiology. Heart Fail Rev. 2020. doi: 10.1007/s10741-020-09961-9.
- Jindal M, Nagpal M, Singh M, **Aggarwal G**, Dhingra GA. Gold Nanocarriers- Boon in Cancer Theragnostic. Curr Pharm Des. 2020 June. Online ahead of printing.
- Katoch A, Nagpal M, Kaur M, Singh M, **Aggarwal G**, and Dhingra GA. Development and Characterization of LBG-PVA Interpenetrating Networks Incorporating Gliclazide for Sustained Release. Current Drug Therapy. 2020. (E-pub Ahead of Print)

Publications other than COVID-19

- Sharma P, **Thakur AK** and **Goyal RK**. Emergence of Bevacizumab as biosimilar with ophthalmologic prospects for patients and pharma industry. Ophthalmology and Ophthalmic Surgery. 2020; 3(1):122.
- Aijaz U and **Goyal RK**. Knowledge attitude and factors responsible for Vitamin and Calcium deficiency among youth. Int. J. Trend Sci. Res. Rev. 2020: 4(5).
- Kumari A, **Pathak D**, Asthana S, Bile acids mediated potential functional interaction between FXR and FATP5 in the regulation of Lipid Metabolism. Int. J. Biol Sci. 2020. Vol. 16 P.2308-2322.

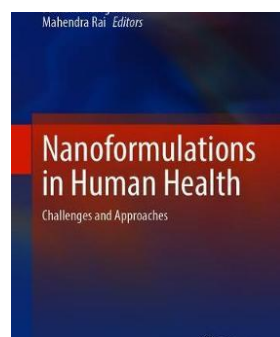
To get to know, to discover, to publish - this is the destiny of a scientist

- Francois Arage

No Research Without Action, No Action Without Research!

- **Pandita D.**, Kirthanashri S.V., Lather V., Khar R.K. Scintigraphy in translational research. Pharma Times, IPA.
- **Pandita D.**, Munjal A., Poonia N., Awasthi R., Kalonia H., Lather V. Albumin coated mesoporous silica nanoparticles of docetaxel: Preparation, characterization, and pharmacokinetic evaluation. International Journal of Polymeric Materials and Polymeric Biomaterials (IF 1.982)
- Poonia N., Lather V., Kaur B., Kirthanashri S.V., **Pandita D.** Optimization and development of methotrexate and resveratrol loaded nanoemulsion formulation using Box-Behnken Design for rheumatoid arthritis. ASSAY and Drug Development Technologies (IF 1.420)
- Puri V, Nagpal M, Sharma A, Thakur GS, Singh M, and **Aggarwal G.** Development of binary dispersion and nanocomposites of irbesartan with enhanced antihypertensive activity. Bio Impacts. 2020;10(4): 41-46.
- Dahiya R, Dahiya S, Fuloria NK, Kumar S, Mourya R, Chennupati SV, Jankie S, Gautam H, Singh S, Karan SK, Maharaj S, Fuloria S, Shrivastava J, Agarwal A, Singh S, Kishor A, Jadon G, **Sharma A.** Natural bioactive thiazole-based peptides from marineresources: Structural and pharmacological aspects. Marine Drugs, 18: 329, 2020.
- Kumar R, **Sahoo P.K, Pathak D, Manchanda S.** Pharmaceuticals in The Water Supply. International Journal of Innovative Science, Engineering & Technology. 7 (7), 269-276.
- Pal S, Yadav J, **Kalra S.** Injury profile in Karate athletes-A literature review. Journal of Critical Reviews. 2020; 7(9):110-1159
- Kumar S, Kumari R, **Manchanda S.** A review on Ethosomes. International Journal of Innovative Science, Engineering & Technology. 7 (7), 443-442.
- **Kalra S,** Ajmera P, Yadav J, Sindhu B, Pawaria S. Development of a valid and reliable questionnaire to identify factors affecting the health of post-menopausal women in selected areas of Gurugram India. Journal of Critical reviews.2020 (Accepted)
- Pawaria S, **Kalra S.** Effect of Deep Cervical Flexor Training on Respiratory functions in chronic neck pain patients with forwarding head posture. International Journal of Research in Pharmaceutical Sciences.2020; 11(3)
- Pawaria S, **Kalra S.** Effect of Inspiratory muscle training and aerobic training on pulmonary function, exercise capacity and cardiorespiratory fitness in females with hypothyroidism. International Journal of Research in Pharmaceutical Sciences.2020:11(3). (Accepted)
- **Tonk R., Sharma P.,** Sharma S., Siwach V. Use of current therapeutic devices in the treatment of Restless legs Syndrome: A Review. Medico-legal Update. April-June 2020; 20(2):136-140
- Verma R, Nagpal M, Singh TG, Singh M, and **Aggarwal G.** Improved efficacy of lovastatin from soluplus-PEG hybrid polymer-based binary dispersions. Current Bioactive Compound. 2020;16 (E-pub ahead of print)
- Verma D., Mirza MA, Taleuzzaman M, Khuroo T, **Talegaonkar S.,** Kumar P, and Iqbal Z, Development and Validation of Reversed-Phase HPLC Method for the Simultaneous Detection of Lactone and Carboxylate Forms of Topotecan Along with Thymoquinone: Application to anticancer formulation system. Journal of Analytical Chemistry 2020;75; 503-509.
- Pal AK, **Nandave M,** Kaithwas G. Chemoprophylactic activity of nitazoxanide in experimental model of mammary gland carcinoma in rats. 3 Biotech. 2020;10(8):338. doi: 10.1007/s13205-020-02332-z.
- Aggarwal R, Targhotra M, Kumar B, **Sahoo P.K, Chauhan MK.** Novel Polypseudorotaxanes Hydrogel based Nail Lacquer of Efinaconazole for Transungual Drug Delivery. Drug Deliv Lett. 2020 (Accepted)
- Aggarwal R, Targhotra M, Kumar B, **Sahoo P.K, Chauhan MK.** Treatment and management strategies of onychomycosis. J Mycol Med. 2020; 30(2): 100949.
- Aggarwal R, Targhotra M, **Sahoo P.K, Chauhan MK.** Onychomycosis: Novel Strategies for Treatment. J Drug Deliv Sci Tec. 2020; 25: 101774.
- Aggarwal R, Targhotra M, **Sahoo P.K, Chauhan MK.** Onychomycosis: Efinaconazole Nail Lacquer for the Transungual Drug Delivery: Formulation, Optimization, Characterization, and in vitro Evaluation. J Drug Deliv Sci Tec. 2020. 101998.
- Targhotra M, Aggarwal R, **Chauhan MK.** Bioactive compounds against effective management of Drug-Resistant Tuberculosis. Curr bioact compd. 2020;16:1.

- Targhotra M, Chauhan MK. An overview of Various Approaches and Recent Patents on Buccal Drug Delivery Systems. Current Pharmaceutical Design, Bentham Science, 2020.
- Yadav S, Ajmera P. Development of a valid and reliable questionnaire assessing the strengths and limitations of Telemedicine services in India. Journal of Critical Reviews. 2020 (Accepted)
- Targhotra M, Aggarwal R, Chauhan MK. Bioactive compounds against effective management of Drug-Resistant Tuberculosis. Curr bioact compd. 2020;16:1.
- Abidi S, Labani S, Singh A, Asthana S, Ajmera P. Economic Evaluation of Human Papilloma Virus Vaccination in the Global South: A systematic Review. International Journal of Public Health, Springer. July 2020.
- Dudhraj V, Faisal A, Mukhopadhyay D, Sai LV, Corona Virus Impacts to Dental Practice and Potential Salivary Identification. Journal of Oral Medicine and Dental Research. 2020, 1(1)-06.
- Dudhraj V, Faisal A, Sreekiran CV, Mukhopadhyay D. National Health Policy 2017: Can it release the health-related burden of diseases towards achieving health-related sustainable development goals?. International Journal of Creative Research Thoughts. Vol.8, Issue 8, pp.675-687, August 2020.
- L Siddiqui, H Mishra, S Talegaonkar, M Rai, Nano formulations: Opportunities and Challenges in Nano formulations in Human Health, (Editors: S Talegaonkar, M Rai), 2020, 3-12, 1st Edition, Springer Nature Switzerland AG, ISBN-10: 303041857X.



Public Service and Awareness Programs

Webinars and Scientific Sessions Delivered

The common fact of today are the product of yesterday's research

- Anonymous

Prof. Ramesh K. Goyal

- Opportunities & Challenges in Rebuilding the Education Sector in the Post Covid 19 Era organized by GTU, Ahmedabad and Anand Pharmacy College on 10th March, 2020.
- Adaptation of Challenges of Covid-19 in The Education Sector at Kendriya Vidyalaya Sangathan & ASSRM, New Delhi on 25th May 2020.
- Ignorance of Pharmacy and Therapeutics Committee in Hospitals in the Management of COVID-19: A possible cause of Rampant Deaths organized by Lloyd Institute of Management & Technology on 6th June 2020.
- Immunity and the Yoga organized by DD Urdu on 21st June, 2020.
- Rising trends of depression in COVID 19 epidemic organized by Double Helical, New Delhi on 27th June, 2020.
- Role of Ayush Medicine in the Management of COVID-19 Pandemic organized by Double Helical on 3rd July 2020.
- Challenges in Drug Information Service related to COVID 19 organized by Karnataka Pharmacy Council on 4th July, 2020.
- Rebuilding Education with Opportunities & Challenges of COVID 19 organized during e-FDP at Nirma University, Ahmedabad on 10th July, 2020
- Research Methodology during Corona: Opportunities & Challenges organized by APC Convention 2020, Alwar Pharmacy College on 11th July, 2020.
- Farewell to COVID-19 Fear: Spiritual & Ayurveda Approach organized by Brahmakumaris, Mount Abu on 19th July, 2020.
- Role of Pharmacy to Fight Against the COVID 19 organized by Double Helical, New Delhi on 1st August, 2020
- Career Opportunities for Pharma Graduates: An Over view in the light of Post COVID 19 Era organized by Pharma Graduates Development Program, MNR College of Pharmacy, Hyderabad on 3rd August, 2020.
- Immunomodulators in COVID 19, organized by PHD Chambers, Delhi & Multani pharma on 6th Aug 2020.
- Opportunities and Challenges for Practical Training in Pharmacy through E-Learning organized by National level e-FDP, DIT, Dehradun on 8th August 2020.

- Human Rights in Pharmaceutical & Medical Sciences organized by Human Rights Commission on 23rd August, 2020.

Prof. D.P. Pathak

- CPE Webinar on “Understanding Practice School & its Concept in UG Pharmacy Education” organized by the Pharmacy Council of India, New Delhi, In Association with Rajiv Gandhi University of Health Sciences, Bengaluru and JSS Academy of Higher Education and Research, Mysuru on 23rd May 2020. (Participated)
- Departmental Promotion Committee (DPC) review meeting for various Group - A Scientific posts of Indian Pharmacopoeia Commission held on 22nd July 2020. (Participated)
- Conducted a virtual inspection of Amrita Vishwa Vidyapeetham, Coimbatore, Tamil Nadu on 16th & 17th July 2020 for Institution of Eminence (IoE) status as a Member of UGC Expert Committee.

Prof. Harvinder Popli

- Role of Pharmacy to fight against Covid-19 organized by Double Helical on 1st August, 2020
- Enabling Startups Ecosystem to Fight Covid-19 organized by PHD. Chamber COVID-19 pandemic- A challenge to the global pharmaceutical industry organized by Chaudhary Banskil University Haryana on 14th May, 2020
- Virtues of Virtual education in Pharmaceutical Sciences during and after COVID-19 organized by Lloyd Institute of Management & Technology on 17th June 2020 Lloyd.
- Resource person for the International Webinar “Meditation For Happy and Healthy Life” on 27th June, 2020 organised by SPER.
- Empowering Pharmacists for Next Generation to Improve Health and Wellness during International conference on 30th -31st May, 2020 organised by SPER.

Prof. Geeta Aggarwal

- Insights to combat COVID-19 with nanotechnology and its environmental impact organized by Operant Pharmacy Federation on 5th June 2020.
- Research opportunities for Pharmacy students in combating COVID-19 with Nanotechnology organized by Chitkara University, Baddi, Himachal Pradesh on 9th July 2020.

- Paradigm shift in Drug Delivery Systems during National conference organised by Career Point University, Himachal Pradesh on 22nd August, 2020.
- Resource person for International e-Conference-2020 Theme: "Pharmaceutical Care & Management perspective of COVID-19 Pandemic" for the topic Use of Phytopharmaceuticals as Immunity boosters organized by University School of Pharmaceutical Sciences, RayatBahra University, Mohali in Collaboration with APTI Punjab Branch on 15th to 16th May 2020.

Prof. Ajay Sharma

- Role of Immunostimulant Herbs in the Management of COVID-19, Organized by Dr. H. S. Gour University, Sagar, Madhya Pradesh, India, 22nd May 2020.

Prof. Richa H. Rai

- "Role of Physiotherapy in ICU for patients of COVID 19"- for Gayatri College of Physiotherapy.

Dr. Gaurav Kumar Jain

- The Upside-Down World- the Changed Paragon of Education and Research jointly organized by ICT Mumbai and NIPER, Mohali on the topic “New Considerations and Challenges for Student Under COVID-19- How to be prepared for the after-effects”

Dr. Mukesh Nandave

- “Innovations in Management of Diabetes” in “Colloquium-2020” by JIS University, Kolkata from June 11-13, 2020.
- “Writing Competitive Research Grant Proposals: Do's and Don'ts” by Raghavendra Institute of Pharmaceutical Education and Research(RIPER)-in association with IPA (Anantapuramu branch) and International Society of Pharmacoeconomics and Outcomes Research (India-Andhra Pradesh Chapter) from July 27th to August 1st 2020.
- ‘Can Open Source Drug Discovery Help in Developing Covid-19 Treatment at Pandemic Speed?’ in Two Days Online National Conference on "India's Dominance in Combating Emerging Health Challenges through Discovery of Therapeutic Armamentarium" organized by Sandip University, School of Pharmaceutical Sciences, Nashik in association with Indian Pharma Education Society Lucknow ‘’ from 15/05/2020 to 16/05/2020.
- “Better Innovations for better Lives of Diabetics”

during three days National Webinar Series organized by Dr. Rajendra Gode College of Pharmacy, Malkapur, Maharashtra on from June 24-26, 2020.

Dr. Sushama Talegaonkar

- Talk on “Novel Drug Delivery Systems: An Overview”, organized by Parul University on 11th July 2020
- Member, North Zonal Scientific committee “Disso Research Presentation, India 2020-Online

Dr. Jaseela Majeed

- Co-hosted a webinar with Dr. Madan Thangavelu, Genome Biologist, Cambridge on the theme “Ayurveda and Pandemics: Lessons for the current COVID-19 crisis, future pandemics and other global health and wellbeing challenges”, organized by Ayush Valley Foundation on 27th June 2020.

Dr. Sheetal Kalra

- Webinar on “Fitness testing in Sports” organized by Rehabilitation Sciences Group on June 4, 2020
- Webinar on “Skill fitness testing in sports” organized by Indian Association of Physiotherapy (IAP) on July 25, 2020
- Panellist in the “PAN India Online Talent Search Competition organized by the Indian Association of Physiotherapy (IAP) in May 2020
- Panellist in Panel discussion on “Current trends in Physiotherapy education and Clinical Practices” on June 14, 2020, by International Sports and Orthopaedics Manual Therapy (ISOMT)

Dr. Sapna Dhiman

- Role of Physiotherapy in ICU for patients of COVID 19- for Gayatri College of Physiotherapy Sambalpur on 10th May 2020

Dr. Parul Sharma

- 1st Youth Physio-Webicon 2020, International Conference of Physiotherapy & Students on “Transforming education in COVID-19 Lockdown through E-learning” from 26-04-2020 to 30-04-2020, Jagannath University, Bahadurgarh

Ms. Rakhi Ahuja

- Moderated webinar on the topic "Emerging Role of AI tools in HR selection process" organized by DPSRU Placement Cell on 20th June 2020 . The Resource Person was Meenakshi Khara, Director-HR, Evueme Selection Robot

Studies by Faculty and Students

1. A study based on a survey on Impact of COVID-19 pandemic on learning and education of University Students in the light of current scenario on COVID-19 by students and Faculty of School of Allied Health Sciences for identifying various aspects of the physical, social and psychological impact of COVID-19 pandemic on the learning and education of University students. The objectives of this study are: (a) To assess the current operational changes in higher education, due to COVID 19 outbreak; (b) To assess the difficulty and challenges faced by the university students due to paradigm shift of entire teaching methodology; (3) To determine the psychological impact of newer online teaching patterns on students and (d) To evaluate the acceptance of online teaching mode among university students. So far, we have been able to collect data via questionnaire (google forms) from more than 400 University students

Team Members: Dr. Jaseela Majeed, Dr. Puneeta Ajmera, and Dr. Sheetal Yadav (Co-ordinator), Ms. Neha Dhoundiyal (MHM Student)

2. A Project is done on Knowledge, Attitude, and Practice of the general public towards COVID-19 in India: An online cross-sectional study” by Ms. Aastha Singh, student of MPH under the supervision of Ms. Rakhi Ahuja.

Community Services

- Distribution of Food Packets, Disinfectants (HOCL), Sanitizers and Masks:



Prof. Harvinder Popli along with Prof. Ramesh K. Goyal distributed food packets as community service in collaboration with Rotary Club.

“ Be the change you wish to see in the world



- Dr. Gaurav Kumar Jain along with Shri Balaji Sewartha has run a campaign for providing food and groceries to poor and needy people during COVID lockdown. He distributed Free of Cost Hand Sanitizers to Delhi Police and people for best hygiene practices.
- **Consultancy and COVID-19 Testing Camp:** Dr. Richa Rai organized continual Consultancy and COVID 19 Testing Camp at SAANS Foundation with Dr.PP Bose for the MNC Wipro Enterprise Pvt Ltd. during the Pandemic COVID-19.

Awareness Drives

Awareness Drives by Faculty and Students of School Allied Health Sciences

Sensing the danger of a possible outbreak of COVID-19 in the initials days of news itself, an early awareness program was organised by students and faculty of School of Allied Health Sciences through distribution of pamphlets and displaying posters on 01st Feb 2020 in the G.K Narayan Auditorium of DPSRU. The program was Coordinated by Dr. Jaseela Majeed, Associate Professor and Head of School of Allied Health Sciences. Followed by Initial awareness drive, another **Awareness programme on the Prevention and Spread of Noval Corona Virus (COVID-19)** was organized by the Departments of Public Health , Hospital Management and Pharmaceutical Management of School of Allied Health Sciences on 6th March 2020. The purpose of the program was to create awareness and educate the University students, faculty, staff and local community regarding the preventive intervention techniques that help in reducing the transmission of the disease.



Awareness session for Diploma and Undergraduate students

Prof. (Dr) Ramesh K. Goyal, Hon'ble Vice Chancellor, DPSRU, inaugurated distribution of posters and pamphlets inside and outside the University campus. He also briefed about various precautionary measures that should be undertaken to prevent the deadly disease. The Program was coordinated by Dr Jaseela Majeed, Dr Puneeta Ajmera, Dr Sheetal Yadav, Ms. Rakhi Ahuja and Dr J. Swaminathan.



वायरस से बचने के लिए इतना तो क सेना	
करना न करें	करना न करें
अच्छेतर सेमेटिक से दिन में कई बार हाथ धोएं, उन्हें रोकें तो उन्हें। मीटर दूरी बनाएं।	अगर हाथों में धुआं से धोएंगे हैं तो किसी के संपर्क में न आएं।
जो इंसान रोकक व बर्तन रखे हैं उन्हें करीब 1 मीटर की दूरी पर रखें।	बाह-बाह अस्पति आला, नकल और मुँह को खुले से बंद।
बाँसों व लीकने कमर मुँह और नकल को दिग्गु धेरा से कतरा करें। बाद में डिब्बों में रोक दें।	सर्जिकल रुकनों पर रुकने से बंद।
डिब्बर से निरन्तर समय में मुँह और नकल को ठकने के रिच मरक व कपड़े का प्रवेण करें।	अधिक पणुओं से संपर्क व कपड़ों/अच्छेतर से के सेकन से बंद।

Distribution of Pamphlets amongst University students, staff and local community in the vicinity.

Awareness is the greatest agent for change

- Eckhart Tolle



On 13.03.2020, Dr. Jaseela Majeed, organized a training in collaboration with an NGO - *Concerned Citizen & Project team*, on **Post Disaster Psychosocial care** to sensitize Masters students of DPSRU, Jamia Milia and Delhi University for providing psychological and emotional support at the times of disaster.



- Prof. Harvinder Popli took initiative with SPER, Rotary, Rotaract RI District 3011 & Rotary Club of DPSRU, wherein phase one saplings were planted by participants from 5th July to 7th July, 2020 to help the nature flourish.



- In the phase 2 of the initiative, Prof. Harvinder Popli encouraged the participants to donate food, clothing accessories and masks to security guards, police officers, health workers etc. from 10th July to 12th July 2020.

- Prof. Harvinder Popli, also took initiative in providing shelter and food to stray animals to protect them from starvation from 17th July to 19th July.
- Prof. Harvinder Popli was the Resource Person for National E- Poster Competition Theme: “ Impact of Social Distancing and Lockdown on the Spread of Covid-19 17th May, 2020 organised by SPER.
- Dr. Sushama organized an e-poster and e-article competition on “COVID 19- Impact on Global Pharmaceutical Industry" under the aegis of Indian Pharmaceutical Association.
- Standard Operating Procedures (SOPs) to be followed during the working in University during COVID-19 have been prepared by Dr. Jaseela Majeed, Dr. Puneeta Ajmera, Dr. Sheetal Yadav and the students of School of Allied Health Sciences. These Standard Operating Procedures ensure safety for the faculties and staff while working from University in light of the COVID-19 pandemic. Delhi Pharmaceutical Sciences & Research University is in a relatively close setting with shared spaces like corridors, elevators, stairs, meeting rooms, etc, making the faculty and staff more vulnerable to COVID-19. Hence, to contain the spread of COVID-19, the SOPs should be followed by the faculty and staff members.
- Internship of students at Directorate of Health Services (DHS), Govt of NCT of Delhi: The students of Master’s in Public Health (MPH) and Master’s in Hospital Management (MHM) of School of Allied Health Sciences joined DHS, Ministry of Health, GNCTD for COVID-19 related work. The duration of the internship was for one month. It was a great opportunity for our students to have hands on experience directly with the government efforts in fighting against this global pandemic. Since most of the students are from the stream of Dental Sciences, Homeopathic, Unani medicine, hence had remarkably contributed for the COVID-19 related work. The students were awarded Certificates at the end of the internship period. Dr. Jaseela Majeed, Head of School of Allied Health Sciences coordinated with DHS for the internship.

We make a living by what we get, but we make a life by what we give

- Winston Churchill

“Be the change you wish to see in the world”

- Quarantine – Boosting health, fitness, and beauty tips from afar, WCSC-DPSRU: “World Class Skill Centre” of Delhi Pharmaceutical Sciences and Research University planned a program using online available tools i.e. “Quarantine- Boosting Health, Fitness & Beauty tips, from afar”. In this program they came up with the daily basis yoga, fitness and beauty tips pdfs and videos which were prepared and designed by the students of WCSC-DPSRU courses (Sports Fitness and Yoga Application, Sports Digitalization and Performance Management, Beauty Wellness Consultant courses) to promote health and fitness in this pandemic situation. WCSC-DPSRU also organized series of online yoga sessions, which was solely based on creating awareness on health and lifestyle as during this lockdown we all might be glued to the television screens, mobile phones, or computer screens.

WCSC-DPSRU also launched online yoga sessions for the public as well, to promote and create awareness for health. Along with this the faculty of WCSC-DPSRU also organized some online sessions for the students so that the quarantine time can be utilized for enhancing the knowledge and skills of students. Some of the webinars which were organized by the DPSRU-WCSC “Boosting your stamina”, “Fitness Pilates and art of Pilates prescription”, international webinar on “Meditation for Happy and Healthy Life”. WCSC-DPSRU also celebrated 6th International Yoga Day in the presence of Hon’ble Vice-Chancellor, Prof. Ramesh K. Goyal by organizing an online yoga session for all the WCSC centers of Delhi and for the University where the students gave 1-minute yoga challenge to the teachers. All these activities were organized by WCSC-DPSRU for creating awareness for health and fitness at a large scale for everyone including the University students as well as the public. Also, these activities were planned to improve and develop new skills in WCSC-DPSRU students during this quarantine period.

- Dr. Shilpa Jain, Head School of Physiotherapy, formulated a seven days Public Awareness Program, "DPSRU Workout Warriors" for creating awareness about workout from home during lockdown period.
- Dr. Shilpa Jain also organized International Yoga Day- 2020 on 21st June, with the theme "Yoga at

Home, Yoga with Family” for the students and staff members of DIPSAR, DPSRU, ASSRM, and WCSC, using digital platform focussing on the yoga helping with the situation of COVID- 19, both pre and post-infectious physical and mental wellbeing.

Making it to the Headlines!

“Yoga aur Zindagi” – DD Urdu

On 21st June 2020 (International Yoga Day), at 3:00 PM and 11:00 PM, “Yoga aur Zindagi” – A Unique Yoga Program was telecasted by the DD Urdu channel. This program was focused to rediscover our own country's Health and Spiritual Sciences through all the Subject Matter Experts on Yoga and Health Sciences notably from DPSRU. The interview was taken at DPSRU and consisted of the benefits of yoga and how yoga helps people to be fit and how to keep their body healthy by different yoga techniques. In this program, they have also shown some yoga techniques for flexibility, for improving respiratory functions which were very useful for everyone.

It was such a nice experience to share the views through DD Urdu channel related to Yoga and health by Hon’ble Vice-Chancellor, Prof. Ramesh K. Goyal, Prof. Harvinder Popli, Offg. Registrar, DPSRU, Dr. Madhu Gupta, Associate Professor, and Offg. COO, WCSC-DPSRU, Mr. CP Ray, Yogacharya, and Dr. Shilpa Jain, Associate Professor Quoting the words of Hon’ble Vice-Chancellor, DPSRU, “Yoga is our history, our lifestyle, our habits, our routine and it is not just about exercises.” According to him, Yoga is an ancient technique for staying fit and healthy. The Registrar also had a distinct view that Yoga is about the Mind, Body, and Soul. The effective way to heal in present Pandemic circumstances and to boost immunity is through Pranayama as shared by the COO - WCSC.

Through this program, everyone could comfortably understand that Yogic Sciences are about "The Journey from the Outside to Within." The program was coordinated by Dr. Madhu Gupta.

"My Life, My Yoga"

MyGov Innovation, Ministry of AYUSH

Dr. Shilpa Jain submitted a video for the competition called "My Life, My Yoga", My Gov innovation,

Awareness is like the sun. When it shines on things, they are transformed

- Anonymous

“Media: Amplify your ability to reach more people

Ministry of AYUSH, under the guidance of Prof. Ramesh K. Goyal. With his idea, the team members Dr. Sapna Dhiman, Ms. Lata Dutt, and Ms. Monika Negi worked hard and compiled the similarities in frequencies of OM and AMEN when chanted.

Double Helical

In an interview with Double Helical, Dr. Shilpa Jain explained about the preparations by DPSRU OPD for dealing with the patients who suffered from the corona infection

All India Radio

During the Corona Pandemic which led to sudden lockdown in March 2020 in India, the DPSRU / DIPSAR campus was suddenly deserted and the classrooms desolated. With the purview of conducting some activity with the students, DPSRU took an initiative 'Let's do it together', to promote positivity, collaborative work, originality, and our national language. Paridrishya and Fitoor invited videos made by students and faculty of DPSRU and DIPSAR, under the guidance of Prof. Richa H. Rai, for airing a program on All India Radio World Service Hindi, to motivate the world on how to positively utilize their time with the family members and keep learning. Students conveyed beautiful messages and showcased their talent as well as demonstrated learned life skills and uplifted the morale of many, by depicting their messages on this platform. The program was telecast on the 6th of August 2020.

Events at University

Celebrations infuse life with passion and purpose and with this belief 74th Independence Day was celebrated with flag hosting at university campus which was conducted following government guidelines with utmost care. The flag hosting was done by Hon'ble Vice Chancellor Prof. Ramesh K. Goyal, in the presence of all the faculty members. It was followed by a march past in the leadership of Mr. Aditya Kaushik, Security Officer by all the security guards. The celebration ended with a smile on everyone's face and a pride that even in these tough times we managed to host our tricolour.



Either write something worth reading or do something worth writing

- Benjamin Franklin

National Service Scheme

We all, at National Service Scheme (NSS) of Delhi Pharmaceutical Sciences and Research University, believe on the NSS motto “Not me but you” and with this belief, our university began with constituting a team of like-minded volunteers from all the batches and all the course offered by our university under the support and guidance of Dr. J. Swaminathan, NSS Coordinator and Prof. Rajiv K. Tonk, Programme Officer. We have, to date, more than 300 volunteers and still counting. NSS DPSRU team tries its best to keep all the students updated with various international and national events and conduct activities for the same.



Various events from all over India are shared amongst the volunteers so that they can participate and gain as much as they can from such events. On World Environment Day 2020, NSS came up with an innovative idea for celebrating the same being at home! An activity namely “Friends of Earth” was conducted where many students participated by

sharing their pictures and short videos while nurturing their plant pots and kitchen garden. Some students shared poetry, articles, quotes, and slogans paying tribute to Mother Nature. We are active on social media platforms such as Facebook and share our day to day activities over there so that every member of the DPSRU family can be benefited from the same. We all at NSS stick to laws and our responsibility for the same and we will continue to be so and contribute towards the wellbeing of the nation as far as we can.



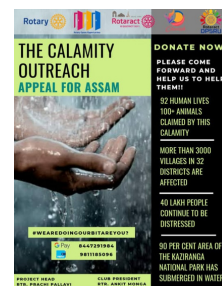
Individually, we are one drop. Together, we are an ocean
- Ryunosuke Satoro

Rotaract Club

Rotaract
Rotary Club Partner



We kick-started the month of May by Fight to Might, followed by Bon Appetite, Mom & the Neonate, Mothers’ Day Celebration, SPER National E-Poster Competition, Meme Mania, International Nurse Day Celebration, Nom Dans Doodle, Treasure Hunt, concluded by Simulacra. May is also the Mental Awareness Month and every year the goal is to fight the stigma, provide support, educate the public, and advocate the policies that support people with mental illness. And, thus our flagship project- Covering Those Nightmares (Project Mann).



June stood observant to an official visit by the E-DRR, followed by Abstain and Develop Creative Slogan Writing, World Environment Day, Art Ingenieux, RJ Hunt, Tambola Night, DPSRU Alumni Meet, International Yoga Day, Speak Up Mind, Fathers’ Day Celebration, Ar'U'tistic (Celebrate Neurodiversity), ‘UN’ DRUG (International Day Against Drug Abuse and Human Trafficking), Virtual Antakshri, Sickle Cell Anaemia and Data Privacy, and letterhead exchanges with Rotaract Club of PGDAV & Central Calcutta. Another Rota year was inaugurated in July and a fresh surge of activities flowed in. Calamity Outreach is an initiative of RaC DPSRU, as we aim to raise funds for people ravaged by natural or manmade catastrophes. The first phase was for the unprecedented damage in Assam, in collaboration with R.I. 3240 & Zomato Feeding India. Project Madhumeha, Diabetes awareness project in collaboration with RID 3020, RaC Vizag City. Virtual Friendship Exchange, letterhead exchange collaboration event on International Friendship Day with over 100 Rotaract and Rotary clubs.

“ Cultural Societies: A Parallel World at DPSRU

Verve - The Literary Society

Verve, a home for many and comfort for most where we converse about poetry, life goals, and everything under the sky. You cannot build a great building on a weak foundation with this belief, Verve organized a webinar session Making It Happen on 31st May 2020 where some of the best alumni of DPSRU who are now part of Indian Institute of Technology (IIT)- Bombay, Madras and National Institute of Pharmaceutical Education and Research (NIPER), S.A.S. Nagar pursuing Masters in Pharmacy, Masters in Business Administration (Pharmaceutical Management), Masters in Business Administration and Masters in Technology (Biomedical Engineering) was the speaker and they guided all the pharmacy students regarding the various aspects of the corporate world which they will face after completing Bachelors. They helped to choose the right career path wisely and gave various tips and tricks to crack GPAT, CAT, and GATE. With more than 300 participants from 15+ varsities and colleges from nearby states, the webinar was a huge success, and Verve plans to conduct another session very soon.

Other than this, Ms. Parinita an eminent poet who has already brought laurels to the society participated in Poetry competition in first-ever Online Perfect Health Mela. Verve signed an MoU with Indian Pharmacy Graduates' Association – Student Forum for their National Level Blog Competition 'Oneiron' under project Dopamine with a theme Dependency of Indian Pharmacy sector on Foreign countries and verve outshone with more than 25 participants in this competition. Verve strive to develop students in and out so that they can

Raag - The Music Society

Even though our normal routine lives came to a standstill due to COVID-19, Raag- The Music society of DPSRU didn't stop bringing laurels to the university. Our beloved former president, Mr. Rohaan Wadhwa, a 4th-year student pursuing B.Pharm from DPSRU and our team member Ms. Riya Tickoo, a 2nd-year student pursuing B.Pharm from the DIPSAR participated in the First Online Perfect Health Mela 2020 held in June and made the judges tap their feet on what they sang. The theme of the competition was to pay tribute to the corona warriors. Ms. Riya secured 1st position in the singing competition while Mr. Rohaan was earned an honorable mention in the same. To ease almost stuck

Scan Me Checkout social media pages!



life, during this lockdown every single one of Raag's members is bringing their soul-touching cover and renditions to Raag's Instagram page which is teeming with viewers. Apart from this, Ms. Riya Tickoo went live for her music performances on various media pages and made Raag proud by being noticed by the very famous Indian music composer Mr. Ehsaan Noorani by being a part of his live session on Instagram. She even became a part of the live session of the songwriter Mr. Raghav Meattle. They both acknowledged her talent by following her on her Instagram handle.

Malang - The Dance Society

Malang felt extremely delightful for their very first collaboration with "Strong She" an NGO, for their event 'Tezaab: Ek Ankahi Dastaan' for the cause of the acid attack. Besides this, one of our members participated in the online dance competition "Danspiration" and secured the first position with her commendable performance. Moreover, they gave a virtual farewell to their beloved seniors by smashing dance performances on their Instagram page and also uploaded a dance video under the title "Separated by Lockdown, United by Dance" on Instagram handle, especially for people to keep up their spirit and boost their enthusiasm for exploring themselves in between this pandemic.

Fitoor - The Dramatics Society

Fitoor – The Dramatics Society has been the most active cultural society during this lockdown period they organized multiple events such as National Vine Making Competition providing artists from all over India a platform to showcase their talents, an interactive session “Artist Stop” with a well-known theatre artist Tarun Kohli for young artists helping to polish their skills and helping them to spread a virtual social message in times of quarantine. They Participated in All India Radio Project to depict the positive aspects of the period of pandemic & physical distancing and demonstrating learned life skills, A musical competition in which one of their Team Members – Adeti Airi (B. Pharm / 3rd Sem / DPSRU) bagged first position and A virtual nukkad Natak event

Creativity is as important now in education as literacy and we should treat it with the same status

- Ken Robinson

organized by v4v India and got a special appreciation for our performance. Fitoor Members Praful Tiwari (B. Pharm / 7th sem / DIPSAR), Priyamvada Srivastava (B. Pharm / 5th sem / DPSRU) & Sarabjot Singh (B. Pharm / 5th sem / DPSRU) took part in a poetry contest organized by v4v India and got a special mention for the same. Sarabjot Singh also participated in a monologue competition organized by the Theatre Kingdom and got a special mention for the same, not just this, he also did voice acting for one of the series on social issue - Peer Pressure, which was organized by team Metanoia in Action. Apart from this Anandita Nair (B. Pharm / 3rd sem / DPSRU) took part in an Oratory competition and won a consolation prize for the same.

Student's Achievements

1. Impact Week #INDIAVSCOV19

A. First Position Team

T: Today Not Tomorrow secured the first position at the event their idea was “Use of Bio enzymes as replacement of chemical sanitizers to fumigate hospitals and other infection spreading areas”. The team was mentored by Mrs. Lakshmi Rao (India) and Baaba A. Barimah (Ghana). The team of six had five students from our university namely Abhinav Gupta, B. Pharm 5th Semester, DIPSAR; Dr. Vibhor Dudhraj, MPH-1st year, DPSRU; Debraj Mukhopadhyay, MPH-1st year, DPSRU; Anas Rashid, MBA (PM) 1st Year, DPSRU, Divya Singh, MBA (PM)- 1st Year and Dr. Kritika Jain from International Laureate University Department of Public Health, Sydney, Australia.



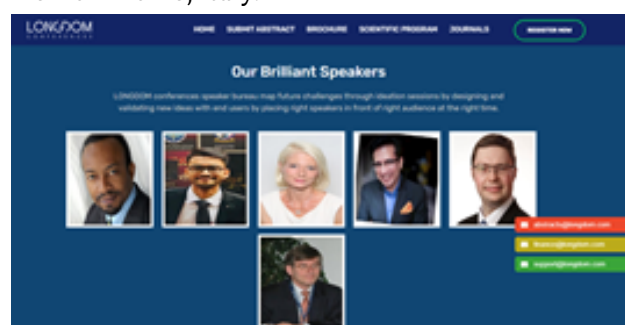
B. Third Position

Team Jaan ke Jaabaaz, secured 3rd Position in the Workshop, with students of our university giving a brilliant presentation of a lucrative product prototype that they developed during the workshop. All student participants of this team were from DPSRU, namely, Ankit Monga, Sarthak Khurana, Luqman Khan, Pranav Gupta and Vipasha Gaur of B. Pharm Third Year. Product made by the team was called Protecto Band, a health statistic measuring device that can help in detecting COVID like symptoms through your health statistics.



2. Speaker at International Webinar

It gives us immense pleasure to share that Dr. Vibhor Dudhraj, Student, Master in Public Health, DPSRU is going to be among the speakers at an International Webinar on COVID-19 Vaccination organized by Longdom Conference to be held on 31st August 2020 live from Rome, Italy.



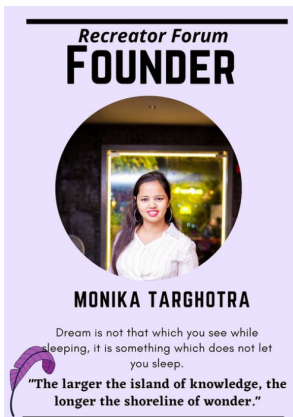
It is a platform for Doctors, physicians, research scholars, students, and business, Pharma professionalsto expose their research work, to share their knowledge in COVID-19 Vaccination. It is an occasion to interact with associates across the globe focused on learning about COVID-19 Vaccines and current research and development status.

The key to success is to start before you are ready

- Marie Forleo

3. Mr. Rohan Aggarwal, 2nd Year, Masters in Pharmacy, Secured 1st position in State in “Online PharmaGameshow” organized by MYBO group Talent Hunt on 8th July 2020. He was also among the finalist in National Blog Competition 2020 organized by Umeed in May 2020

4. Ms. Monika Targhotra, Ph.D. Research Scholar, Department of Pharmaceutics, DIPSAR along with Mr. Rohan Ahharwal, 2nd Year, Masters in Pharmacy, launched a research-based platform/forum online named “ReCreator Forum” for undergraduates, graduates, postgraduates. ReCreator Forum with the aim of "The Larger the Island of Knowledge, The Longer the Shoreline of Wonder". It features Internships, projects, workshops, online courses, and various competitions



Our Writers and Authors

Adarsh P. - An Author

In words of Adarsh P., student of Bachelors of Sports Science, who is also a part of Verve – The Literary society of DPSRU “This quarantine gave us so much



time and I realized it was up to me to either put it to use or waste it. I have had mixed days but tried to be productive and do all that I couldn't do in normal busy days”. He always wanted to write an e-Book and this quarantine gave him a chance. He published his first e-Book on "Intense Workout Plan and Nutrition guidance". According to him, it took hours of work, to edit, Photoshop but all of it was worth it. It can be found Amazon Kindle and his website too. He wrote another e-Book on fat loss which he is offering for free since people are getting unhealthy in this lockdown. It consists of a workout and diet plan for home, for beginners mainly. Other than this, he says he has always been a tech enthusiast and therefore he started an affiliated website on Audio Devices Review. Recently, he co-authored in an anthology as a quote writer. The book is called Chrysanthemum and can be found on Amazon.

"Dive_in_reality" by Yashika Singh

Yashika Singh, a student of 5th semester, has established her blog named "Dive_in_reality". In which she covers all the topics that emphasize on 'Personal Growth'. She is strongly committed to developing one's personal growth as she believes it's a vital part to achieve one's fullest potential. Her blog covers everything beginning from motivation, Inspiration, personal development, strategic goal planning, management, etc that too in a very realistic approach.

An Artistic Blog by Mahima Saini

Mahima Saini, a student of the 5th semester, B. Pharmacy is developing her blog using WordPress. The blog is specifically an 'Artistic blog' which is focused on her writings. She developed this blog as she believes that writing can reach out to any person merely through the language of feelings because that's universal. Her writings include Narrative poetry, Allegory, articles, and quotes having words beautifully sewed together. Her well-curated poetry evokes an emotional response through the words chosen and well arranged for its meaning and rhythm. The articles, whether it be about a human value or Self-love, are written effectively in a communicative way that engages the audience. The quotes have strongly articulated feelings in a simple language. The blog overall is emphasized on tackling the tsunami of thoughts in our minds that we encounter throughout the days of our chaotic lives.

Writing is the best way to talk without being interrupted

- Jules Renard

A Special Poem by Hon'ble Vice Chancellor, DPSRU

कोरोना भाग्य विधाता

ईश्वर ईशु अल्लाह है या नहीं,
ये शायद मालूम नहीं।

धरती आकाश और ब्रह्मांड तो है,
शायद यह एक राज है, भाग्य विधाता।

वेद पुराण कुरान और बाइबल तो है,
नहीं समझ आते ये क्योंकि गहराई जो इसमें है।
विज्ञान की परिभाषा ही सत्य की खोज है,
प्रयोग और परिणाम पर ही विज्ञान को गर्व है।
धरती आकाश और ब्रह्मांड तो है,
पर फिर भी क्यों यह एक राज है, भाग्य विधाता।

क्या पुष्पक विमान कर सर्जन हुआ है,
विज्ञान को यह स्वीकार नहीं,
क्योंकि शायद यह सिर्फ लिखा है।
विज्ञान और अंतरिक्ष यान भी तो है बने हैं, यही तो है विज्ञान है,
प्रमाण जो सबके समक्ष है।
धरती आकाश और ब्रह्मांड तो है,
इसीलिए शायद यह राज है, क्या है भाग्य विधाता।

क्या स्वर्ग या नरक में कोई जा सकता है,
शायद यह कोई सिद्ध नहीं कर पाया है।
उड़कर अंतरिक्ष मानव, ब्राह्मण में पहुंच सका है,
इसीलिए वह चांद का अस्तित्व जान पाया है।
धरती आकाश और ब्रह्मांड तो है,
इसीलिए यह एक शायद राज है, भाग्य विधाता।

पृथ्वी जल अग्नि वायु और आकाश तो है,
यह पंचमहाभूत एक प्रमाण है, विधाता ने जो दिए हैं।
विज्ञान काफी हद तक शायद इन्हें समझ पाया है,
पर असमय में तूफान सुनामी या भूकंप को
अभी तक समझ नहीं पाया है।
धरती आकाश और ब्रह्मांड तो हैं,
आश्चर्य है यह फिर भी, क्यों एक राज है भाग्य विधाता।

दाता है या विधाता, किया तो इसने जीवों का सर्जन है,
और मानते हैं इन जीवों का ज्ञान मानव को धरती पर है।
लेकिन मानव ने भी तो किया क्लोन डोली का सर्जन है,
शायद विज्ञान को इस प्रगति का स्वाभिमान भी है।

धरती आकाश और ब्रह्मांड तो हैं,
इसीलिए शायद यह राज नहीं, विज्ञान के लिये नहीं है भाग्य
विधाता।

स्वाभिमान ही शायद अभिमान में ही बदलता है,
जैविक औषध रॉकेट और स्वचालन ने, इसको और बढ़ाया है।
लेकिन सर्जन पहले जीव का या वायरस का हुआ है,
यह विज्ञान अभी तक समझ न पाया है।
धरती आकाश और ब्रह्मांड तो हैं,
फिर भी क्यों यह सोच कि ये एक राज है भाग्य विधाता।

देकर कोरोना धरती पर हाहाकार मचाया है,
मक्का से वेटिकन तक कोरोना ने कहर दिखाया है।
सुनी हुई जहां की सडकें, धीमा हुयीं जीवन रफतार, विमान तक
भी रुक गए हैं,
मंदिर मस्जिद चर्च देरासर स्तूप और गुरुद्वारे तक शांत हो गए हैं।
धरती आकाश और ब्रह्मांड तो हैं,
शायद अभी भी यह राज एक राज है भाग्य विधाता।

स्वाभिमान है हाथ मिलाने का और मांसाहार लेनेका, शायद ये भी
एक अभिमान है,
नमस्ते कर शाकाहार और योग करना शायद यह एक जीवन सार
है।
बैठे घर में मां बाप बूढ़े और बच्चे, कोरोना से लड़ रहे हैं,
हर दर्द की दवा होगी विज्ञान में पर उपचारे कोरोना के, लिए अभी
भी लड़ रहे हैं।
धरती आकाश और ब्रह्मांड तो है,
अरे अब तो मान लो यह कोई एतराज नहीं है भाग्यविधाता।

हे दाता भाग्य विधाता, भारत में तो तुमको माना है,
वसुधैव कुटुंबकम की भावना से सदा इसे अपनाया है।
भारत में विधाता तो कोई एक राज नहीं, भले विदेश इसे न जान
पाया है,
भारत के तो राष्ट्रगान में है 'जन गण मन अधिनायक जय हे भारत
भाग्यविधाता।
धरती आकाश और ब्रह्मांड ही तो भारत के भाग्य विधाता।
भारत भाग्य विधाता।
भारत भाग्य विधाता।

प्रोफ. रमेश गोयल
कुलपति, दीपसर विश्वविद्यालय

Acknowledgement

Newsletter Editorial team acknowledges the contribution of all the staff members of DPSRU

Glimpses of the Webinars

The collage includes the following webinar posters:

- Double Helical:** "ROLE OF AYUSH MEDICINE IN THE MANAGEMENT OF COVID-19 PANDEMIC" (3-JULY-2020 | 4:00 PM - 5:30 PM)
- PHSRU:** "WEBINAR ON AYURVEDA BASAYANA IMMUNOMODULATORS IN RESTORING HOLISTIC HEALTH SERIES-2" (Thursday 04 August 2020 | 8:30 AM - 10:30 PM)
- LLOYD INSTITUTE OF MANAGEMENT & TECHNOLOGY:** "WEBINAR-5.0 on 'Virtues of Virtual Education in Pharmaceutical Sciences During and After Covid-19'" (20th July 2020)
- DELHI PHARMACEUTICAL SCIENCES AND RESEARCH UNIVERSITY:** "MEDITATION FOR HAPPY AND HEALTHY LIFE" (09th July 2020)
- DELHI PHARMACEUTICAL SCIENCES & RESEARCH UNIVERSITY:** "ORGANISES" LIVE SESSION (09th July 2020)
- DELHI PHARMACEUTICAL SCIENCES & RESEARCH UNIVERSITY:** "INSIGHTS TO COMBAT COVID-19 WITH NANOTECHNOLOGY" (09th July 2020)
- DELHI PHARMACEUTICAL SCIENCES & RESEARCH UNIVERSITY:** "NATIONAL WEBINAR ON INSIGHTS TO COMBAT COVID-19 WITH NANOTECHNOLOGY AND ITS ENVIRONMENTAL IMPACT" (June 05, 2020; 11:00 AM)
- DELHI PHARMACEUTICAL SCIENCES & RESEARCH UNIVERSITY:** "RISING TRENDS OF DEPRESSION IN COVID-19 EPIDEMIC" (27-JUNE-2020 | 4:00PM-5:30PM)
- DELHI PHARMACEUTICAL SCIENCES & RESEARCH UNIVERSITY:** "के साथ 'विशेष वार्ता' शनिवार, धाम 4:30 बजे" (09th July 2020)

Chief Patron

Prof. Ramesh K. Goyal
Hon'ble Vice Chancellor

Advisors

Dr. O. P. Shukla
Registrar, DPSRU

Prof. D. P. Pathak
Director, DIPSAR

Prof. Harvinder Popli
Director, SPS, DPSRU

Chief Editors

Prof. Geeta Aggarwal
Dean Academics, DPSRU

Dr. Sheetal Yadav
Asst. Prof., DPSRU

Student Editor

Ms. Ankita Gaur
B. Pharm., VII Sem.