

APRIL 2021

Volume : 01

SPER NEWSLETTER

Issued for the month of April'21



INSIGHTS

India's
journey to
become one
of the biggest
Pharma hub!

Vaccines
around the
world!

Govt roles &
schemes to boost
Indian startups!

Emerging start-
ups and a lot
more to feed
your brain!



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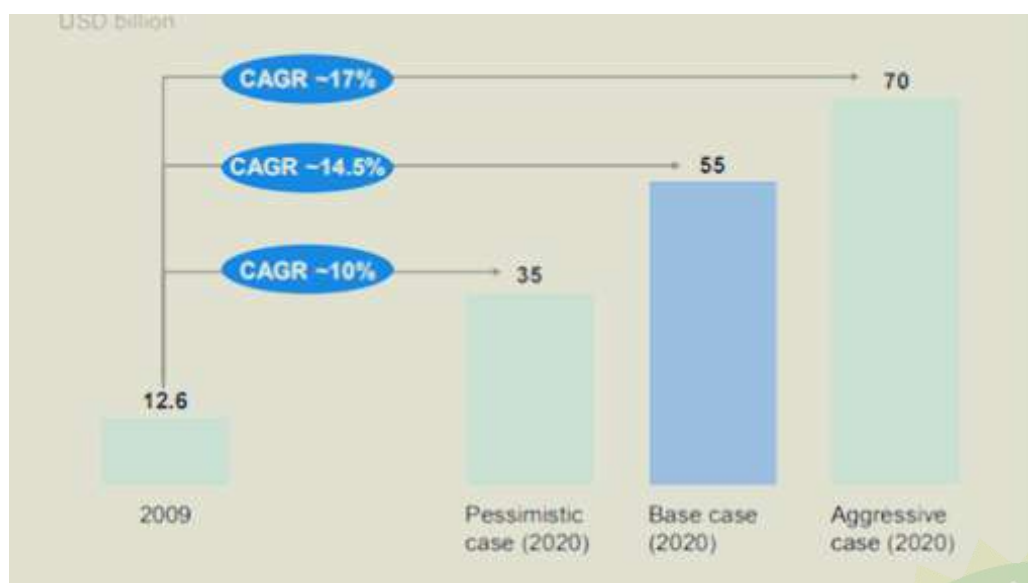


/https://www.sperpharma.org

INDIA'S JOURNEY TO BECOME ONE OF THE BIGGEST PHARMACEUTICAL HUBS

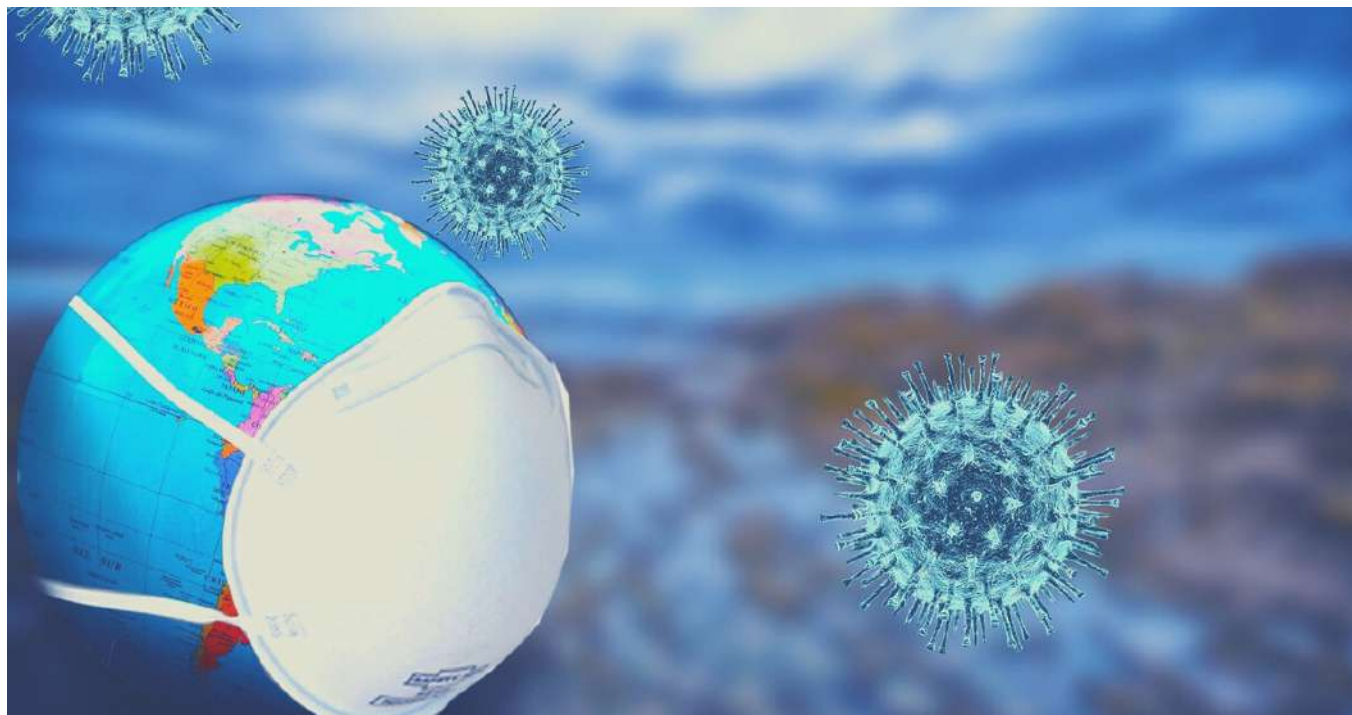


In terms of the volume of pharmaceutical production, India is ranked third globally for providing drugs to over 200 countries and covers over 50 percent of the global vaccine demands.



Generic drugs have traditionally been India's stronghold and have contributed over 70 percent. India produce and supply cost-effective, quality-controlled generic drugs across the world, both in highly regulated markets like the USA, Europe & Japan, and other parts of the world like Africa, Latin America & ASIAN countries.

INDIA'S JOURNEY TO BECOME ONE OF THE BIGGEST PHARMACEUTICAL HUBS



The Covid-19 pandemic might have pushed several economies and businesses to the brink, but India's pharmaceutical industry still stood strong in such an adverse condition. At present, India is the largest provider of generic drugs globally.

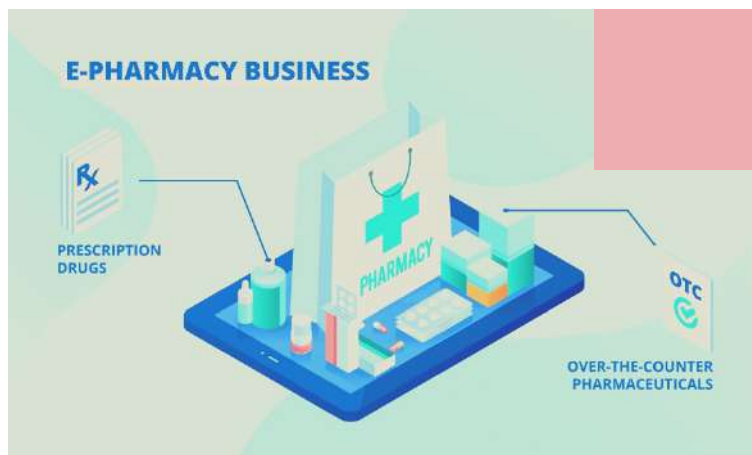
Indian pharma companies cater to over half of the global demand for various vaccines, along with 40 per cent of generic drugs demand in the US. Consequently, the Centre's new-found vision amid the Covid-19 pandemic for a self-reliant India -- 'Aatmanirbhar Bharat' -- if accomplished may well place the country as the fulfilment centre of the world's pharma and healthcare needs.

Thus there are three major possibilities that can catapult the Indian pharmaceutical industry towards global leadership:

- The first and foremost strategy will be to expand healthcare infrastructure, coverage, and emerge as a global hub for drug discovery and development.
- The second technique is to pick our spots in making India the manufacturing hub of critical APIs, to de-risk global supply chains.
- The third is to instil a sense of purpose, and assertiveness in our medical diplomacy.



CAREER PROSPECTIVE & ALTERNATIVE FIELDS IN DEMAND FOR PHARMACY STUDENTS



E-COMMERCE PHARMACIST

There is a lot of e-commerce pharmacy companies like Medlife, Netmed, Pharm easy, img, etc which are gaining constant popularity day after day and that's why the online pharmacy stores are also increasing to supply customer's needs. So, e-commerce pharmacists going to be a big pharmacy career option. There is a big demand for online executive pharmacists. Any pharmacy holding degree of D.Pharm, B.Pharm, M.Pharm, Pharm.D. can apply from this job.

CLINICAL RESEARCH PHARMACIST

Clinical Research is one most important parts of the clinical field. There is a good job opportunity for pharmacists. Pharmacovigilance, drug safety, adverse event management, etc. divisions are there. The various service-based IT company like Cognizant, Wipro, TCS, etc provide opportunity for pharmacist to work as a clinical researcher.



RESEARCH FELLOWSHIP

Research fellowship is for the students who are interested in making career in drug discovery and other molecular research. GPAT qualified or NET qualified candidate are preferred. Research fellowship students can get a good amount of stipend from Govt. of India.



COVID-19 ONGOING VACCINES AROUND THE WORLD



PFIZER-BIONTECH

Type: mRNA

Doses: 2, 21 Days Apart

EUA Date: December 11, 2020

Price: \$19.50 per dose for first 100 million doses

Efficacy: About 95%. Apparently 100% at preventing hospitalization and death.

MODERNA

Type: mRNA

Doses: 2, 28 Days Apart

EUA Date: December 18, 2020

Price: \$25-\$37 per dose

Efficacy: About 95%. Apparently 100% at preventing hospitalization and death.



ASTRAZENECA- UNIVERSITY OF OXFORD



Type: Adenovirus-based

Doses: 2, 28 Days Apart

Likely EUA Date: Authorized in Europe on January 12, 2021, and other countries, but unlikely in the U.S. until spring

Price: \$2.15-\$5.25 per dose

Efficacy: Currently about 70% overall.

COVID-19 ONGOING VACCINES AROUND THE WORLD



JOHNSON & JOHNSON

Type: Adenovirus-based
Doses: 1
Authorized
Price: \$10 per dose
Efficacy: 66% in global clinical trial. In the U.S. it was slightly higher, 72%.
Appears to be 100% effective at preventing hospitalizations and death.

RUSSIA'S SPUTNIK V VACCINE

Type: Adenovirus-based
Doses: 2
Likely EUA Date: Not applicable in the U.S.
Price: \$10 per dose
Efficacy: 91.4%



SINOVAC BIOTECH

Type: Inactivated SARS-CoV-2 virus
Doses: 2
Likely EUA Date: Not applicable in the U.S.
Price: \$60 per dose in China (\$29.75 per dose)
Efficacy: 50.38% to 91.25%, depending on the clinical trial.



COVID-19 ONGOING VACCINES AROUND THE WORLD



NOVAVAX

Type: Protein-based vaccine

Doses: 2

Likely EUA Date: Second Quarter of 2021.

Price: \$16 in the US

Efficacy: 89.3%

CANSINO BIOLOGICS

Type: Viral vector, loading an antigen from the SARS-CoV-2 virus onto an adenovirus.

Doses: 1

Price: Unknown

Likely EUA Date: Not applicable in the U.S.

Efficacy: 65.7% at preventing symptomatic cases; 90.98% efficacy in preventing severe disease.



COVAXIN

Type: Inactivated SARS-CoV-2 virus

Doses: 2 doses, 28 Days Apart.

Price: Govt Hospt(Free);Pvt Hospt(Rs. 250/-)

Likely EUA Date: January,03,2021

Efficacy: COVAXIN® demonstrated 81% interim efficacy in preventing COVID-19 in those without prior infection after the second dose.



COVID-19 ONGOING VACCINES AROUND THE WORLD



COVISHIELD

Type: Adenovirus-based

Doses: 2 doses, 4-12 Weeks Apart

Price: Govt Hospt(Free); Pvt Hospt(Rs. 250/-)

Likely EUA Date: January 03,2021

Efficacy: 90% as per International clinical trials of the Oxford-AstraZeneca vaccine.

PLANNING TO GET VACCINATED IN INDIA ?

ELIGIBILITY

- Age Check : 18 & Above (Phase 3 from May 1)
- No Allergic History
- Pregnant lady should refrain

Register for Phase 3



THINGS TO CARRY

- Photo ID Proof
- Face mask

VACCINE CENTRES

- Govt. Hospitals (free of cost)
- Pvt. Hospitals (Paid)

SIDE EFFECTS

- Pain at injection site
- Mild Fever
- Body Ache

POST VACCINATION

- Personal Monitoring at vaccine centers (30-60mins)
- Face mask mandatory &
- Maintaining social distancing for at least 2 weeks

CURRENT GOVERNMENT ROLES & SCHEMES TO BOOST INDIAN STARTUPS



The Indian government has released various guidelines for schemes for boosting domestic manufacturing in the pharma sector. In line with the vision of Prime Minister Narendra Modi, the schemes have been conceptualised for making India Atmanirbhar in the pharma sector.

The government have established guidelines for four schemes in-order to support the development of bulk drug and medical device parks across the country to promote domestic manufacturing. These schemes of the Department of Pharmaceuticals were approved by the Union Cabinet in March 2020.

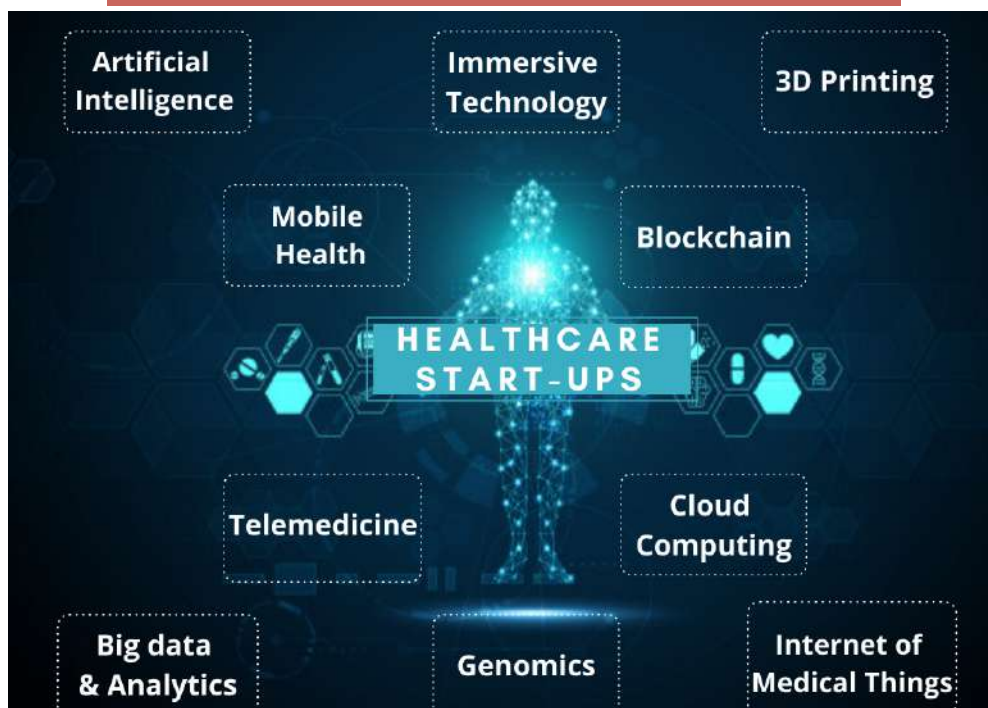
The scheme is - *Production-Linked Incentive (PLI) Scheme for Promotion of Domestic Manufacturing of Medical Devices*

Under this category there are 4 subschemes-

- a.) Assistance to the Bulk Drug Industry for the Common Facility Centre.**
- b.) Assistance to Medical Device Industry for common facility centre**
- c.) Pharmaceuticals Technology Upgradation Assistance Scheme (PTUAS)**
- d.) Assistance for Cluster Development & Pharmaceutical Development Scheme (PPDS)**



HEALTHTECH STARTUPS EMERGED DURING PANDEMIC



Covid-19 has impacted globally. The impact is not only physical, it is unpredictable, emotional, ergonomic and it would be with us for some more time. Every country is trying to contain the spread of corona virus, but after effects of the measures taken to contain the pandemic will haunt us all after successful eradication of the same. Nothing will be normal again as it was earlier, everything will be called as 'New Normal'. But people have started accustoming with the new normal like shopping online, staying home and avoiding travel, increase use of OTT etc.

The following are the models which are emerging in Covid-19.

- ✓Online Education (Classplus, Practically)
- ✓Health & Wellness (Curefit)
- ✓Financial Services (Policy Bazaar, MobiKwik)
- ✓E-commerce (Tech Mahindra, Accenture)
- ✓Food delivery (Swiggy, Zomato)
- ✓OTT Platform & Online gaming (Amazon, Netflix)
- ✓E-pharmacy & Healthcare (PharmEasy, Dozee)



HEALTHTECH STARTUPS EMERGED

DURING PANDEMIC



Eternal Machine

Based in- Bangalore

Product- 3D ventilator splitters to curb shortage during covid-19



Karkhana.io

Based in- Mumbai

Product- 3D printed PPE kits



PerSapiens

Based in- New Delhi

Product- Robot which can sterilize hospital



Staqu

Based in- Gurugram

Product- AI powered thermal camera to detect people with high temperature



Pulse active stations

Based in- Hyderabad

Product- Kiosks to collect samples for Covid 19 test.



Vincense

Based in- Chennai

Product- wearable smart band to monitor vitals



Intugine

Based in- Bengaluru

Product- Application help govt to monitor quarantine people, to ensure that people are following social distancing norms.



Medikabazar

Based in- Mumbai

Product- High-end medical equipment



Pristyn Care

Based in- Gurugram

Product- Tele-consultancy, digital scheduling surgeries & RT PCR test.



PharmEasy

Based in- Mumbai

Product- EPharmacy



NEWLY APPROVED DRUGS

FROM JANUARY 2021 TILL

APRIL 2021.

Sr. No	Brand Name	Generic Name	Innovator	Formulation	Treatment
1	Verquvo	Vericiguat	Merck	Tablet	Chronic Heart Failure
2	Cabenuva	Cabotegravir & Rilpivirine	VIIV Healthcare	IM Suspension	HIV Infection
3	Lupkynis	Voclosporin	Aurinia pharmaceuticals	Capsule	Lupus Nephritis
4	Tepmetko	Tepotinib	Emd Serono Inc	Tablet	Non-small cell lung cancer
5	Ukoniq	Umbralisib	Tg Theraps	Tablet	Lymphoma
6	Evkeeza	Evinacumab-dgnb	Regeneron Pharmaceuticals	IV Solution	Homozygous familial hypercholesterolemia
7	Amondys 45	Casimersen	Sarepta Theraps Inc	IV Solution	Duchenne muscular dystrophy
8	Nulibry	Fosdenopterin	BridgeBio Pharma, Inc.	IV infusion	Rare genetic disease molybdenum cofactor deficiency Type A
9	Pepaxto	Melphalan flufenamide	Oncopeptides	IV	Refractory multiple myeloma



NEWLY APPROVED DRUGS

FROM JANUARY 2021 TILL

APRIL 2021.

Sr. No	Brand Name	Generic Name	Innovator	Formulation	Treatment
10	Azstarys	Serdexmethylphenidate & Dexmethylphenidate	Commcave therapeutics sa	Capsule	Attention Deficit Hyperactivity
11	Fotivda	Tivozanib	Aveo Pharms	Capsule	Renal Cell Carcinoma
12	Zegalogue	Dasiglucagon	Zealand pharma as	IV	Severe hypoglycemia
13	Ponvory	Ponesimod	Janssen pharms	Tablet	Multiple Sclerosis
14	Qelbree	viloxazine	Supernus Pharms	Capsule	Deficit hyperactivity disorder
15	Nextstellis	Drospirenone & Estetrol	Mayne Pharma	Tablet	Oral Contraceptive
16	Jemperli	Dostarlimab-gxly	GSK	IV Infusion	Endometrial Cancer
17	Zynlonta	Loncastuximab tesirine-lpyl	ADC Therapeutics SA	IV Infusion	Refractory large B-cell lymphoma



NOVEL THERAPIES FOR THE TREATMENT OF DEADLY DISEASES

CANCER

✓**Trastuzumab Deruxtecan: trastuzumab deruxtecan (ENHERTU®), a HER2-directed antibody and DNA topoisomerase I inhibitor conjugate, is being developed for the treatment of HER2-expressing solid tumours, including breast cancer, gastric cancer, colorectal cancer and non-small cell lung cancer.**

✓**Recent advances of oncolytic virus in cancer therapy-A herpes simplex virus (HSV) -based oncolytic virus, T-VEC, has completed phase III clinical trial and has been approved by the U.S. Food and Drug Administration (FDA) for use in biological cancer therapy.**

✓**Cellular immunotherapies for cancer-Cellular immunotherapies are based on the administration of living cells to patients and have developed hugely. The two cellular immunotherapies gain FDA approval: tisagenlecleucel (Kymriah) and axicabtagene ciloleucel (Yescarta)**

✓**The USFDA authorized marketing of the GI Genius, the first device that uses artificial intelligence (AI) based on machine learnings in detecting lesions (such as polyps or suspected tumors) in the colon during a colonoscopy.**

✓**Engineers at Northwestern University have invented a stick-on device- Battery-free UV dosimeter for melanoma patients.**

NOVEL THERAPIES FOR **THE TREATMENT** **OF DEADLY DISEASES** **CARDIOVASCULAR DISEASES**

✓The primary method for managing heart transplant rejection was the invasive technique of endomyocardial biopsy - a heart biopsy. Today, a genetic diagnostic test is performed on a blood sample, providing a non-invasive test to help manage the care of patients post-transplant.

✓The automated internal cardiac defibrillator is a device that treats arrhythmias. It has become the first line of defence in patients who are at high risk for sudden cardiac death.

✓Currently, none of the FDA-approved drugs provides a cure against pulmonary hypertension. Hence a novel treatment for this lethal disorder is by silencing pathological genes, expressing therapeutic proteins, or through gene-editing applications.

✓A number of stick on devices are also invented: Electrocardiograph (ECG) to measure electrical activity of a newborn's heart, ECG and seismocardiograph, which operates as a digital stethoscope, ECG and heart-sound sensor.



NOVEL THERAPIES FOR THE TREATMENT **OF DEADLY DISEASES** **ALZHEIMER'S DISEASES**

✓**Tauvid (Flortaucipir) injection**, the first drug used to help image a distinctive character of alzheimer's disease in the brain called tau pathology.

PARKINSON'S DISEASE

✓**Ongentys capsules**, used to treat patients with Parkinson's disease who are having "off" episodes while taking drugs (levodopa and carbidopa) to treat this condition.



SPER HIGHLIGHTS



**WORLD
CANCER
DAY**

**SPER
STUDENT FORUM
(M.P.)**
Presents Webinar
**World Against
Cancer**
*'Recent
advancements and
future prospects'*

YOUTUBE LIVE

#SPER #SPER_SF "I AM & I WILL" 4TH February 6:00 PM

GUESTS OF HONOR



Dr. Upendra Nagaich
National Secretary, SPER (India)



Prof. (Dr.) Akhlesh Kumar Singhai
State President, SPER (M.P.)

SPEAKERS



Dr. Akash Tiwari
DM Medical Oncologist
Shalby Hospital, Indore



Dr. Nobil Skaria
Senior Oncology
Clinical Pharmacologist
ASTER Medcity, Kochi



Dr. Robin N Rajan
Oncology Data Analyst
Concert AI, Bangalore

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In collaboration with SPER Market Research

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<https://forms.gle/DPG4u7x8VnQjU64b9>





**DYNAMIC ROLE OF SOFT SKILLS:
BOOSTING STARTUPS
ONLINE WORKSHOP**

**A WEBINAR ON IMPROVING
YOUR SOFT SKILLS PRESENCE**

SPEAKER

ASHUTOSH PASTOR
MANAGER, START-UP INCUBATION
IIT DELHI, INDIA

THE ONLINE WEBINAR AIMS TO BRING THOUGHT LEADERSHIP AND ADVOCACY FOR STARTUPS AND BUSINESSES. IT IS DESIGNED TO TEACH THE SOFT-SKILLS AND THEIR ROLE IN THE PLANNING AND EXECUTION OF PROGRAMS AIMED AT BUILDING A SUCCESSFUL STARTUP.

**FEBRUARY 9, 2021 | 3 PM
REGISTER ONLINE**
<http://bit.ly/soft-skills-webinar>

A LINK IS PROVIDED AT THE END TO JOIN THE WHATSAPP GROUP

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IIC Coordinator, DPSR University

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PDM University

CONTACT US:
44-729-1984, 905-360-7083

www.dpsru.edu.in | www.pdm.ac.in




**WICCI AND
SPER WOMEN FORUM**


JOIN US AT OUR NEWLY RENOVATED STUDIO
AS WE CELEBRATE WOMEN'S DAY

IN COLLABORATION WITH:
AARAH CREATIONS

TIME: 4-6 PM
DATE: MARCH 8, 2021
ADDRESS: B-45, 3RD FLOOR, OKHLA PHASE-II
HIGH TEA WILL BE SERVED

BE PRIVY TO LATEST DESIGNS AND
COLLECTIONS FROM AARAH

RSVP
MEENU MIGLANI (9910063378)
HARVINDER POPLI (9899700704)



**Society of Pharmaceutical
Education & Research (SPER)**

Society of Pharmaceutical Education and Research (SPER)
Students' Forum presents
Industry Defined Problems (IDP)

Testing your knowledge from the fields of:

- 1) Technical field (Pharma based subjects)
- 2) Management field

ONLY one of the category can be chosen by the participants.

Rules for the event:

- 1) Registration and submission (only PDF format) for the competition should be done using the given link only.
- 2) It should not exceed 1 page. Font: Times new Roman, size: 12.
- 3) References and accurate data are necessary and a must.
- 4) Plagiarism is strictly prohibited and will lead to disqualification.

Registration/submission link
<https://sperpharma.org/sper-SF-IDP.aspx>

Last date to register and submit
April 6, 2021

For further queries contact

SPER HIGHLIGHTS

Online Webinar on International Women's Day

Women in leadership: Achieving an equal future in a COVID-19 world

CHIEF GUEST: Dr. Harvinder Popli
Professor DPSRU (Delhi)
National President SPER Women Forum

Speakers



Dr. Monica Gulati
Sr. Dean, Faculty of Applied
Med. Sci. LPU Phagwara (Pb)



Dr. Sapna Malviya
HOI Pharmacy, MIPs
Indore (MP)



Dr. Ujjwal Nautilyal
Principal, HIP,
Paonta Sahib (HP)

Organizing Committee



Society of Pharmaceutical Education & Research (SPER)

Students' Forum presents Photography Contest

(Portrayal of awareness towards your surroundings)

Instructions to participate:

- Single snapshot of your surroundings/ locality with no filter only on jpeg format.
- Abstract describing the picture should also be submitted (pdf) with not more than 100-200 words.
- Single Participation.

Points to be added in abstract:

- Measures taken to maintain surroundings clean. (If it is clean)
- Measures which can be taken to keep the surroundings clean. (If not clean)



Certificate will be provided to
all the participants and winners.

Registration/submission link

www.sperpharma.org/SPER-SF-Poster-WHD-2021.aspx

Last date to register and submit

April 7, 2021, 2:00 PM

For further queries
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Society of Pharmaceutical Education & Research (SPER)

SPER SUMMER INTERNSHIP PROGRAMME 2021 (April 2021 - June 2021)

SPER brings you an opportunity to apply for a summer internship training program to impart your skills and unleash your talent inside you.

Seize the opportunity to gain an experience and expertise at par with the industry expectations across domain.

Interact with industry leaders and get carrier-oriented advice across the pharma industry.

Learn the basics and prepared to be hired by developing your practical skills.

Limited number of seats only on first come basis, to apply send your one-page resume to sperstudentsforum@sperpharma.org before March 15, 2021.

Preference will be given to life members of SPER

Visit: <https://www.sperpharma.org>

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- ✓ Travel grant for students and young scientists to attend the scientific international seminars and conferences*

KNOW MORE!

- ✓ Information activities inside and outside the country through our updated website
- ✓ To get eligible for number of awards as given by SPER

BENEFITS

SAVE MORE!

- ✓ Special discount (per article) in the Article Processing Charges (APC) for the Life Members of the SPER
- ✓ Highly reduced registration fees at seminars, symposia, conferences, lectures and exhibitions of the SPER

Visit https://www.sperpharma.org/Join_SPER.aspx to know more!

**Contact us for feedback & suggestions -
sperstudentsforum@sperpharma.org**



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