

RESEARCH NEWSLETTER

Oct. 2016 to Jan. 2017



GET WELL SOON

**with least
ANTIBIOTICS!!**

It is our pleasure to release 2nd issue of Research Chronicle aiming to showcase about various research activities and achievements performed during Nov. 2016 to Jan. 2017.

'Antibiotic Resistance' is the theme considered for this edition of the chronicle as it appeared as a global health threat due to irrational use of antibiotics by health professionals. Worldwide deliberations were held at UN headquarters on 21st September, 2016 in order to highlight the significant consequences of antimicrobial resistances resulting in complications, even death. Consequently, this issue will reflect various cases of emerging crisis of antibiotic resistance. People desperately need conscious efforts towards preventive healthcare, innovative molecules as well as alternative therapies as a replacement.

Research Cell appreciates faculty and research scholars for their active participation and contribution in all type of research activities. We feel pleasure to congratulate the awardees of Sumandeep Vidyapeeth Research Award 2015-16. We look forward to see your achievements at national and international platform.

Our Newsletter shares the research experiences and valuable suggestions of our eminent professor of Department of Pharmacy, Dr. R. Balaraman. We are sure that his hard work and dedication in research will definitely motivate our young scientists.

We would appreciate your feedback towards improvement in this research newsletter and also your valuable suggestions in order to perform high end research at our university.



CONTENTS

● Global Research Theme	01
Antimicrobial Resistance	
● View Points from the UN officials	01
● Antibiotic Resistance in NEWS	01
● Clinician Responsibility towards this Global Issue	02
● Alternative Medicines	03
● Opportunities for Extramural Research Projects	04
● Achievements of our Faculty	05
• Patent	
• Publication	
• Research Award 2015-16 Conferred upon our Faculty & Researchers	
● From the View Point of Our Faculty Dr. R. Balaraman	06
● Recent Developments	09
• Suggestions for submission of Extramural Research Proposals	
• Institutional Research Committee(IRC)	
• Motivation for Research Projects under SVRFS	
• Active Participation of Faculty in Research Collaboration with Institutes/Govt. Agencies/Universities at National and International level	
• Ongoing Clinical Trials	
● Research Facilities available at Central Research Lab	10
● Participation of Faculty in Research Projects	11
● Appointments	12

GLOBAL RESEARCH THEME - ANTIMICROBIAL RESISTANCE



**HIGH-LEVEL MEETING ON
ANTIMICROBIAL RESISTANCE**
21 SEPTEMBER 2016, UN HEADQUARTERS, NEW YORK

MEETING AT THE UNITED NATIONS, WORLD LEADERS SIGNALLED AN UNPRECEDENTED LEVEL OF ATTENTION TO CURB THE SPREAD OF INFECTIONS THAT ARE RESISTANT TO ANTIMICROBIAL MEDICINES.

Antimicrobial resistance (AMR) has become one of the biggest threats to global health and endangers other major priorities, such as human development. All around the world, many common infections are becoming resistant to the antimicrobial medicines used to treat them, resulting in longer illnesses and more deaths. At the same time, not enough new antimicrobial drugs, especially antibiotics, are being developed to replace older and increasingly ineffective ones.

VIEW POINTS FROM THE UN OFFICIALS

- Antimicrobial resistance poses “a fundamental, long-term threat to human health, sustainable food production and development.” “It is not that it may happen in the future. It is a very present reality – in all parts of the world, in developing and developed countries; in rural and urban areas; in hospitals; on farms and in communities,” UN Secretary-General Ban Ki-moon.
- “Antimicrobial resistance poses a fundamental threat to human health, development, and security. The commitments made today must now be translated into swift, effective, lifesaving actions across the human, animal and environmental health sectors. We are running out of time,” said Dr. Margaret Chan, the Director-General of WHO.
- For the first time, Heads of States committed to taking a broad, coordinated approach to address the root causes of AMR across multiple sectors, especially human health, animal health and agriculture. This is only the fourth time a health issue has been taken up by the UN General Assembly (the others were HIV, non-communicable diseases, and Ebola).

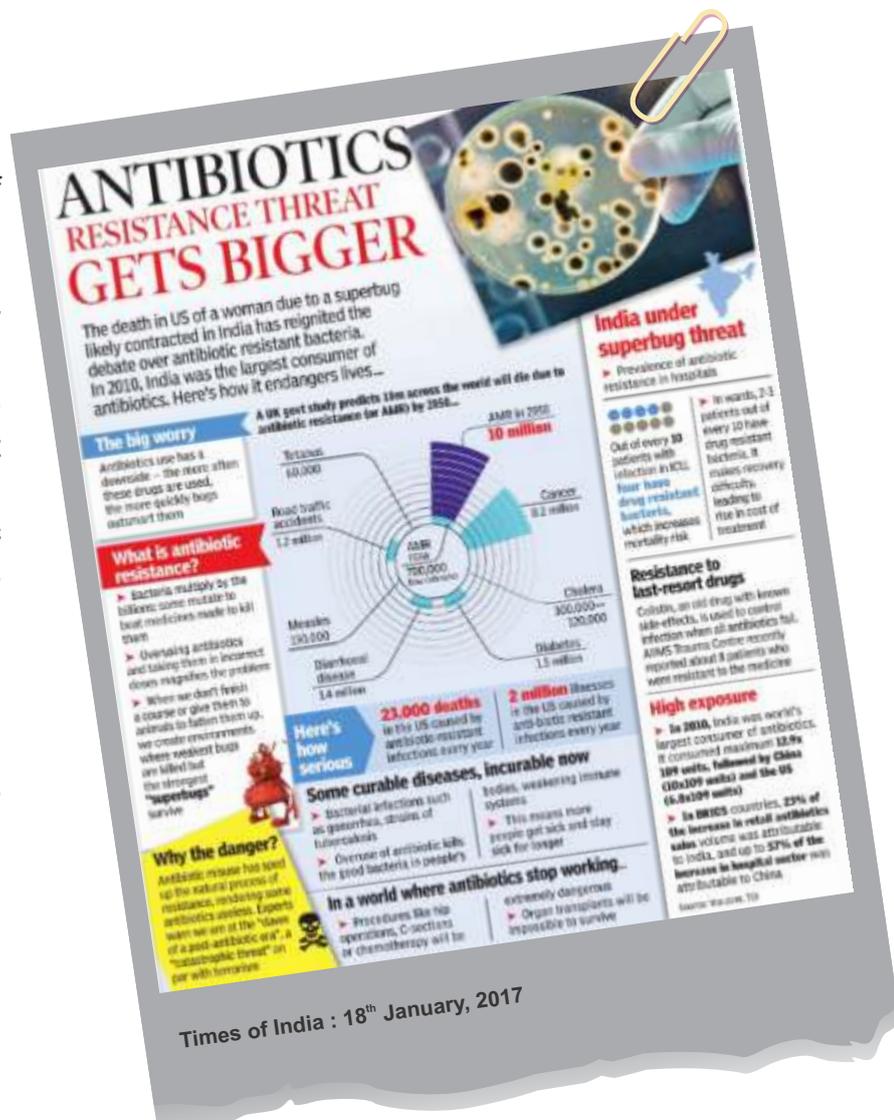
ANTIBIOTIC RESISTANCE IN NEWS

In the next ten years, the world could find itself in the midst of an epidemic, it cannot control if it does not get together and take the spread of Antibiotic Resistance-said by Billionaire and Co-Founder of US Technology Giant Microsoft Bill Gates.



https://sputniknews.com/art_living/201612301049142021-antibiotic-resistance-gates

An American woman, who contracted an infection while being treated for a thigh bone fracture in India two years ago, died recently. CDC Atlanta, which houses one of world's most advanced laboratories, conducted tests on the wound specimen later and confirmed the presence of New Delhi Metallo-Beta-Lactamase (NDM) - a [superbug](#) that makes bacteria resistant to antibiotics. The incident has triggered a lot of concerns among health experts. Though antibiotic resistance is a global public health threat, misuse of antibiotics is rampant in India. According to a 2016 report in international journal PLOS, the infectious disease mortality rate in India is 416.75 per 100,000 persons and is twice the rate prevalent in the United States when antibiotics were introduced.



CLINICIAN RESPONSIBILITY TOWARDS THIS GLOBAL ISSUE

Stewardship is every prescriber's responsibility. As per WHO Global strategies for Containment of Antimicrobial Resistance, clinician should have knowledge about :

- Importance of appropriate antimicrobial use and containment of antimicrobial resistance
- Disease prevention (including immunization) and infection control issues
- Promote undergraduate & postgraduate educational program on the accurate diagnosis and management of common infection for all health care workers
- Educate patients on antimicrobial use and importance of adherence to prescribed treatments
- To influence prescribing habits such as economic incentive, promotional activities and inducements by the pharmaceutical industry

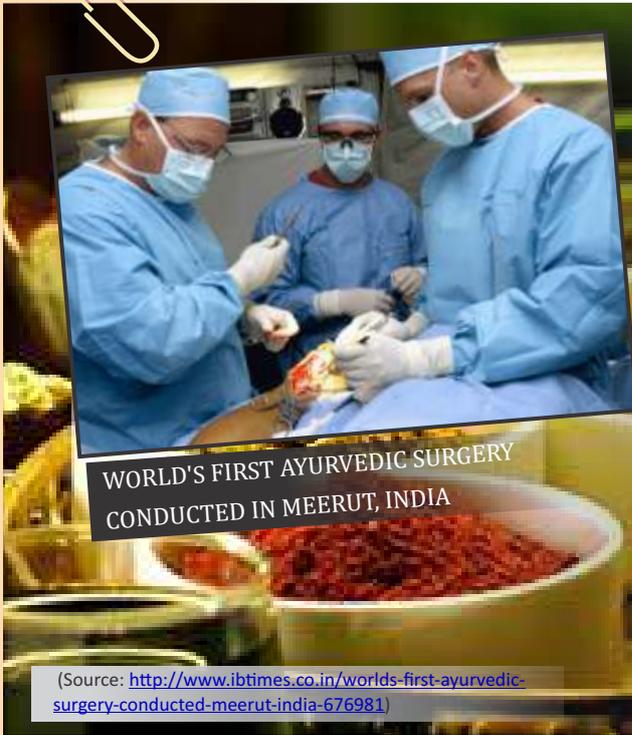
Indian Council for Medical Research (ICMR) and the Research Council of Norway (RCN) seeks to establish a health research relationship for encouraging research in a range of health-related areas of mutual interest, including human vaccines, infectious diseases and antimicrobial resistance.

Call for proposal is Open till **April 26, 2017**

<http://www.icmr.nic.in/icmrnews/ICMR-RCN%20call%20text.pdf>



ALTERNATIVE MEDICINES



WORLD'S FIRST AYURVEDIC SURGERY
CONDUCTED IN MEERUT, INDIA

(Source: <http://www.ibtimes.co.in/worlds-first-ayurvedic-surgery-conducted-meerut-india-676981>)

Doctors of Anand Hospital, Meerut, Uttar Pradesh performed operation on removal of 240gm prostate from the body on 83 years old patient, Ojaswi Sharma, without use of antibiotics. A team of doctors, led by Urologist Subash Yadav, consulted top ayurvedic experts in the country, emphasized the possibility of conducting surgeries, without use of antibiotics, and cited the ayurvedic medicines that can replace allopathic drugs in surgery. The doctors used extracts of ayurvedic herbs like Amla, Turmeric, Shigru (Drumstick), Guggul (Gum resin), instead of antibiotics during the surgery. At present, all standard operating procedures involve use of antibiotics to reduce incidence of surgical site infection. While Amla improves immunity, Giloy helps in liver detoxification. The medicines were administered 10 days before the operation.

In study of Multi drug resistant Tuberculosis, Dr. Rajesh Shah, a world-renowned homeopath and secretary of Global Homeopathy Foundation, along with Abhay Chowdhury, famous virologist and director of Haffkine Institute, Mumbai have developed a new drug from tuberculosis germs for the patients of the dreaded infectious disease. Homeopathic medicines called 'Nosodes' are prepared from organisms, including the bacteria and virus responsible for diphtheria, smallpox, measles, and the like; and are in practice long before the vaccines came into existence. Dr. Shah said, "The new method developed is modern and scientific. The new medicine is sourced from current strains of tuberculosis, including the MDR-TB. Medicines prepared from deadly germs can help treat many diseases and the method has been followed for years in developing vaccines. This is the first time that the germ-based drug has been made applicable to TB and it is safe for human consumption. The new nosode prepared from the current strains of tuberculosis organisms is useful for improving the immune system of the patients who may be prone to frequent respiratory infections. It will support the conventional treatment of tuberculosis and can be used along with the allopathic medicines."



<http://timesofindia.indiatimes.com/city/mumbai/Haffkine-comes-up-with-homeo-drug-for-TB/articleshow/46648115.cms>



Call for Proposals **NOW OPEN**

OPPORTUNITIES FOR EXTRAMURAL RESEARCH PROJECTS



S. N.	Call for Proposal	Link	Deadline
1.	Department of Health Research, Government of India	http://www.dhr.gov.in/sites/default/files/Advertisement%20Application%20HRD%20Scheme_1.pdf	Open throughout the year
2.	Technology Interventions for Disabled & Elderly	http://www.scienceandsociety-dst.org/TIDE.pdf	Open throughout the year
3.	Indo-Norwegian co operation on antimicrobial resistance	http://www.icmr.nic.in/icmrnews/ICMR-RCN%20call%20text.pdf	26 th April, 2017
4.	Cooperation India Netherlands Technology for a Sustainable Healthcare: Minimally invasive techniques	http://www.dbtindia.nic.in/dbt-netherlands-joint-call/	2 nd May, 2017
5.	ICMR -Participation in the Health Systems Research on Road Traffic Injuries	http://icmrextramural.in/ICMR/app_srv/icmr/gl/formats/Call_for_proposals_Road_traffic_injuries.pdf	Expired on 20 th Dec., 2016, Communicated earlier
6.	Call for proposal in the Field of Ageing & Health FORTE	http://icmrextramural.in/ICMR/app_srv/icmr/gl/formats/Indo-SwedenGuidelines.pdf	Expired on 12 th Jan., 2017, Communicated earlier
7.	Indo-Sri Lanka joint Research Programme	http://www.dst.gov.in/sites/default/files/Sri-Lanka-Call-text-2016.pdf	Expired on 30 th Dec., 2016, Communicated earlier

Achievements of Our Faculty



Proudly announcing that two of our faculty of Sumandeep Vidyapeeth have bring their research at patent filing level. Dr. Bhavna Dave, Professor and Head, Department of Paedodontics & Preventive Dentistry, KMSDCH has filed an Indian patent entitled “Dispensing Nozzle for Toothpaste” on 20thSeptember,2016. Second Indian patent entitled “Denture Flask” was filed by Dr. Paranjay Prajapati, Reader, Department of Prosthodontics, KMSDCH on 26th August, 2016.

Publication

Dr. Dipen Sureja, Associate professor, Department of Pharmacy has published research article in the Journal of Saudi Chemical Society having Thomson Reuters impact factor of 1.978.

Research

Conferred upon Faculty
& Researchers



2015-16

S.N.	Name	Designation	Department and Institute
1	Dr. Geetanjali Purohit	Assistant Professor	Dept. of Physiology, SBKS MI & RC
2	Dr. Parth Goyal	PG Student	Dept. of Psychiatry, SBKS MI & RC
3	Anuj Kodnani	UG Student	SBKS MI & RC
4	Dr. Chandramani More	Professor and Head	Dept. of Oral Medicine & Maxillofacial Radiology, KMSDCH
5	Dr .Surabhi Sinha	PG Student	Dept. of Oral Pathology & Microbiology, KMSDCH
6	Rao Naman Rajeshkumar	UG Student	KMSDCH
7	Dr. Rajeshkumar A Maheshwari	Associate Professor	Department of Pharmacy
8	Snehal Patel	PG Student	Department of Pharmacy
9	Hinshu Denishkumar Navichandra	UG Student	Department of Pharmacy
10	Dr. Medha Wadhwa	Assistant Professor	Department of Management
11	Radhika N Javta	PG Student	Department of Management
12	Suresh V.	Associate Professor	Mental Health Nursing, Sumandeep Nursing College
13	Madan Kumar	PG Student	Mental Health Nursing, Sumandeep Nursing College
14	Dr. Noel Samuel Macwan	Assistant Professor	College of Physiotherapy
15	Pooja Raval	PG Student	College of Physiotherapy
16	Chaitri Kurpe	UG Student	College of Physiotherapy

FROM THE VIEW POINT OF OUR FACULTY



Name: Dr. R. Balaraman.

Qualification: Ph.D., FAMS., FIPS.

Designation: Professor

Department: Pharmacy

Contact No: 9898183938

e-mail ID: rbalaraman2000@yahoo.com

Que. 01 Sir, please tell us about your research experiences and also detail the most excited research project you lived through.

Ans. 01 My 35 years of research work in the field of Pharmacology provided in earning an H-index of 25 and citation index of 2500. Besides, more than 20 candidates secured Ph.D. under my guidance. In appreciation of my research work in diabetes and cardiovascular pharmacology, I received 3 Oration and several other National awards including Fellow of the National Academy of Medical Sciences (FAMS). After four years of stint at Sarabhai research center at Baroda, I joined Pharmacy department in 1977 as a lecturer. Along with my teaching I completed my doctoral work under the guidance of Dr. O. D. Gulati, Prof and Head Department of pharmacology, Medical college, Baroda.

I did pioneering work on the mechanism of cadmium-induced hypertension as a part of my doctoral thesis. I subsequently utilized this model for new drug discovery of synthetic drugs with beta-blocking activity to be used for hypertension. I have worked on herbal drugs for their significance in

dyslipidemia, diabetes and hypertension. During this journey of research, I established the role of 5HT on hypertension, the effect of pioglitazone, L-NAME and curcumin on endothelial function in diabetic rats. This work was recognized such that Prof T'arna Ravingerov'a Institute for Heart Research, Centre of Excellence for Cardiovascular Research, Slovak Academy of Sciences, Slovakia invited my doctoral student to carry out a collaborative study on the Effect of Hemidesmus indicus and Hibiscus Rosa-sinensis on Ischemia-Reperfusion Injury in Isolated Rat Hearts.

My research work on the "Effect of romanbant on the role of adipocytokines mediated on insulin sensitivity in ob/ob mice and Retinol Binding Globulin in cardiovascular complications" is the most significant work which gave me an impetus to work on the various metabolic disorder. The work which enthralled me most was the study on the effect of various antidiabetic drugs on the expressions of mRNA levels of various inflammatory adipocytokines in obese and diabetic animals

Que. 02

'As a visionary pharmacologist, what do you think about coming potential area of research after 10-15 years? What's your opinion? (A message to all pharmacologist).

Ans. 02

There are emerging trends in the treatment of cancer, metabolic disorders, viral diseases, parasitic infections like malaria and Multidrug-resistant TB., Many newer monoclonal Antibodies(MABs) and other biological agents are now available for the treatment of cancer. The remission and the survival rates have increased to several folds after the treatment of these agents. Few more MABs are in Phase III trials for colorectal, prostate and other cancer related to blood. Recently a new vaccine has been tried for Ebola and Dengue virus. Research conducted by an international team and published in the journal Nature showed that a single dose of the compound (called DDD107498) not only cured the malarial infection caused by the Plasmodium falciparum strain of parasite in mouse models, it also prevented them from acquiring the infection. SGLT2 inhibitors and incretin analogs are coming in a big way for the treatment of diabetes. There are reports that SGLT2 inhibitors will be useful for diabetic related cardiovascular complications. I envisage major advancement in the treatment of several killer diseases in another 10 years with the help of high-throughput screening, combinatorial chemistry, computer-aided drug design and novel drug delivery system(NDDS). With the help of PET scan, many diseases are easily diagnosed. However there is no breakthrough in addressing AGE(Advanced Glycosylated Endproduct) breakers for the treatment of diabetic complications. The challenges we are facing now for the treatment of dreadful diseases will be resolved in another 10 years due to advancement in biomedical Science and technology as well as fast communication. I anticipate that there will be an increase in the longevity of Indians after 10 years or so.

Que. 03

'What your views on collaborative research proposals with pharmacologists, biomedical scientists and clinicians towards novel diagnostic

assays, ADRs, Pharmacovigilance, medical treatments and process provisation?

Ans. 03

Firstly there is a need of pharmacovigilance department in each medical college and hospital where pharmacologist and clinician should work together for monitoring and management of adverse drug reactions.

Secondly, the basic research conducted by pharmacologists, and biomedical scientists should be translated to clinical research with the help of clinicians. This translational research will be helpful in achieving the goal of "Bench to Bedside". Oftentimes the research done by pharmacologist and biomedical researchers are ended up with publications in journals but never reached the clinical levels. It is high time that clinicians, pharmacologists, and biomedical researcher should understand each other languages and meet on a common platform to amalgamate basic and clinical research.

Thirdly new drug discovery is a long and costly affair. To circumvent this condition, research should be undertaken to work on already existing drug for the new therapeutic potentialities. Many drugs that are banned in the past are now rejuvenated for the treatment of other diseases. For example, thalidomide which was banded in 1963 due to its teratogenic effect is brought back for the treatment of multiple myelomas. Therefore pharmacologist, biomedical researcher, and clinicians should now work for restoring the older drugs for treating other diseases.

Que. 04

What are those constrains which should be resolve in order to enhance research activities at Sumandeep Vidyapeeth? How those issues can be sorted out?

Ans. 04

In every University there are few constraints remain which hampers the research work. When I was with M.S. University I got a research grants worth 20 lacs from AICTE but it took almost one year to get the equipment and chemicals from that. There is always some inordinate delay in processing all the quotations and

tenders. It is part of the system and Sumandeep is no exception to this. The issues should be sorted out at the higher level.

Que. 05

Do you think pharmacy can play a key role in SV research excellence? How can Pharmacy faculty and researchers can participate more than any other faculty of our University?

Ans. 05

In the recent past, the pharmacy department has been well equipped with modern instrumentation like RTPCR, PCR, ELISA reader, Gel Documentation, and many other analytical instruments. With all these modern facilities one can do high-quality research work in molecular biology. We are also capable of using this modern technique to assess mRNA, DNA expressions of molecules in the biological system. It is possible to diagnose many genetic disorders. Besides the metabolic disorders which are prevalent in our country can be easily detected by using these instruments. With all these facilities the faculty of pharmacy can do extraordinary research work in the field of molecular biology, pharmacology, and newer drug delivery system. we also have a technique to develop nanoparticles which can target any particular diseased tissues. These facilities created at the pharmacy department can be utilized by other biomedical researchers. Therefore, the faculty of pharmacy is in an advantageous position to do excellent research work.

Que. 06

Any message to young researchers and faculty.

Ans. 06

Dedication and hard work are essential for a good researcher. Now a days many researchers misuse the networking system for their convenience and fabricate unreliable data. Due to this, India's scientific output has tremendously increased in recent years. Globally, it ranks 10th but poor in average citations per paper. We might succeed by numbers but not by quality. We need citable publications.

In just released December edition of Science magazine, Priyanka Pulla, writes: "India is home to a flourishing underworld of open-access journals that masquerade as legitimate scientific publications." The reason is,

researchers and academicians strongly believe in metrics since these are surrogate markers to climb the 'ladder of successes'. UGC should be blame for mandating all faculty to publish papers in order to be evaluated favorably and for promotion.

The most disappointment is a large number of researchers affiliated with prestigious Universities and institutes have also published in predatory journals. Among all disciplines, medicine (clinical science) and biological sciences rank the top. Why? It is well answered by Raju in his publication: ever since academic performance indicators became the major criterion for appointments and tenure promotions, the number of research papers published by teachers working in universities and colleges across India in predatory journals has increased (Raju, N. V., How does UGC identify predatory journals? Curr. Sci., 2013, 104(11), 1461–1462).

Therefore, researchers should publish their research work in non-paid journal only and avoid publishing in those which demand money as well as research content from the researchers.

I personally feel that research has never been a burden in my academic performance instead it is another extension of my academic knowledge. I believe that research is an integrated part of our curriculum.

To conclude, We must take TIME to Teach, Inspire, Motivate, and Empower young researchers.

RECENT DEVELOPMENTS

1. Suggestions for submission of extramural research proposals

- A copy of research proposal is required to be submitted by PI in Research Cell (for record).
- PI may discuss the project details and its scientific and clinical hypothesis with Research Cell before submission, in order to get all the input required by the funding agencies.
- All the projects are required to be submitted through HoI only in order to update the institute office for the same.

2. Institutional Research Committee (IRC)

- Institutional Research committee has been constituted with the aim to identify, discuss and disseminate the research status amongst inter- departmental level of the institution and forward such activity to the Research Cell time to time.
- It has been resolved that-
 1. A meeting of IRC shall be conducted every quarter to discuss all aspects of the research activity including facilities and the queries of researchers.
 2. Committee shall discuss about the status of on- going and completed research projects.
 3. Committee shall discuss about the new high end research activity either departmental or inter- departmental level and also at inter-institutional level.

3. Motivation for Research Projects under SV Research Fund Scheme (SVRFS)

- Research Cell has constantly been communicating and mailing relevant research papers for the reference to every constituent institution to prepare and submit original high end research projects under the SVRFS. Research Cell is optimistic and believes that this support shall augment the number of submission of the research projects in future under this scheme in order to alleviate the research activity at our University. Research Cell is committed to provide full support to our researchers so as to make every hurdle to be disappeared.

4. Active Participation of Faculty in Collaboration with other institutes/ government agencies/university at National & International level

- Dr. Prasad Muley, Professor, Department of Pediatric, SBKSMI & RC has established collaboration with Respiratory Research Network of India (RRNI) for respiratory study in pediatric division. RRNI provides the assistance to investigator who has the professional knowledge and experience required for performing research projects.
- Dr. Dulari Gandhi, HoD, Department of Pediatric, SBKSMI & RC has established collaboration with State Institute of Health & Family Welfare (SIHFW), Gandhinagar to give training to Medical Officer and Staff Nurses. For the establishment of Facility Based Integrated Management of Neonatal and Childhood Illnesses (F-IMNCI) training center, SBKSMI & RC, Sumandeep Vidyapeeth Deemed to be University has received grant of INR. 5,21,000 from SIHFW.

5. Ongoing Clinical Trials

- ThinqPharma CRO Limited sponsored clinical trial of evaluation of safety and clinical equivalence of generic Clotrimazole Troche/Lozenges USP, 10 mg (Unique Pharmaceuticals Ltd., India) to Clotrimazole Troche/Lozenges[®], 10mg (Roxane Laboratories Inc., U.S.A.) in subject with Oropharyngeal Candidiasis is going on. This trial is carried out by Dr. Ajay George and Dr. Rashmi Mahajan, and coordinated by Ronak Shah, Research Assistant, Research Cell.
- Evaluation of the therapeutic bio-equivalence of 2 Tacrolimus 0.03% topical ointment formulations in adult patients with moderate to severe atopic dermatitis is sponsored by Lambda Therapeutic Research. This trial is carried out by Dr. Kishan Ninama and Dr. Rashmi Mahajan and coordinated by Spears Mind Research Solutions LLP.

Research Facilities available in Central Research Lab for Faculty and Research Scholars

S.N.	Instruments & its quantity	Broad Usage area	Incharge Name	Incharge Details
1.	Semi-Automated Biochemistry Analyses	Semiautomated Biochemistry Analyzer	Mr. Pawan Toshniwal Assistant Prof., Department of Biochemistry, SBKS MI& RC, SVDU	Ext. 287 & 415 Email: pawantoshniwal2003@gmail.com
2.	Hematofluorometer	Zinc protoporphyrin estimation		
3.	Bio-Rad-D-10 HPLC	Hemoglobin variant analysis, thalassemia and HbA1c estimation		
4.	Laboratory Centrifuge , Remi	Separating particles from a solution according to their size, shape, density, viscosity of the medium & rotor speed		
5.	Vortex Mixture (KHCM - 2223), Remi	Mixing of liquids		
6.	Blood Mixer, Top Tech	For mixing of blood		
7.	Digital pH/ potentiometer, Syntronics	Measuring the pH of aqueous solution		
8.	Magnetic Stirrer, Remi	For dissolving solids in liquids		
9.	Micro Centrifuge , Remi ZBBN -3285	Separating particles from a solution according to their size, shape, density, viscosity of the medium & rotor speed		
10.	Binocular Microscope, Olympus/ 2Nos	For microscopic examination of object		
11.	Needle Cutter	To discard needles & syringes		
12.	Bookfield Viscometer	Viscosity measurement of various liquid or semisolid dosage forms	Dr. Ashim Sen Associate Prof., Department of Pharmacy, SVDU	Contact No. 9377977540 Email: ashims01@gmail.com
13.	UV -Visible Spectrophotometer, ShimadZU	Quantification of drug		
14.	FTIR Spectrophotometer, ShimadZU	Identification of drug and its compatibility with various excipients		
15.	RP - HPLC, ShimadZU Prominenc	Quantification of drug in dilute samples		
16.	Digital Balance Adventure Pro	To weigh exact quantity of sample		
17.	RT -PCR Applied Bio Science	Gene expression, SNP genotype,	Mr. Ghanshyam Parmar Assistant Prof., Department of Pharmacy, SVDU	Contact No. 9825963050 Email : ghanstaurus22@gmail.com
18.	PCR Applied Bio Science	Gene expression, SNP genotype, DNA amplification		
19.	Convertible Freezer, Samsung	To maintain minus temperature for temperature sensitive materials		
20.	Nano Spectrophotometer	Quantification of DNA / RNA		
21.	Biosafety cabinet, ESCO-Clan-II	Sample preparation		
22.	Refrigerated centrifuge	For separation of different phases		
23.	ELISA plate reader (Bio-Rad)	Nucleic acid and plasma estimation		
24.	Gel Electrophoresis (SYSTRONICS)	DNA & RNA identification & analysis		
25.	Gel Doc EZ Imager, Bio-RAD	Visualization and analysis		

PARTICIPATION OF FACULTY IN RESEARCH PROJECT

S.N.	Name of PI	Title	Funding Agency	Status
1.	Dr. Punit Singh Assistant Prof., Dept. of Ophthalmology, SBKSMI&RC	Correlation of frequency doubling perimeter in preperimetric glaucoma patient	SVRFS	Submitted
2.	Dr. Vipul Gurjar Professor, Dept. of Surgery, SBKSMI&RC	Comparative study of transanal suture rectopexy (Chivate's procedure) VS MIPH and conventional haemorrhoidectomy in management of haemorrhoids	SVRFS	Submitted
3.	Dr. Neerja Mahajan Professor, Dept. of Prosthodontics, KMSDCH	Comparative evaluation of the effect of muscle conditioning and retraining exercises on EMG activity & bite force in complete denture patients - Randomized Control Study	SVRFS	Submitted
4.	Dr. A. K. Seth Principal, Dept. of Pharmacy	In vitro study of anticancer properties of <i>Phylla nodiflora</i> on MCF -7, HeLa and HepG2 cell lines and characterization of bioactive compound	GUJCOST	Submitted
5.	Dr. Chintan Aundhia Assistant Prof., Dept. of Pharmacy	Bisphosphate conjugated hydroxyapatite bone targeting nanoparticles for the therapy of Osteoporosis	GUJCOST	Submitted
6.	Aditya Mundra, Saurabh Mamtani, Dimple Jain Faculty involved: Vikas Chandrakar	To evaluate the efficacy of pain relief a product developed at SRISTI for muscular pain	SRISTI BIRAC , Govt. of India	Submitted
7.	Alok Rai, Mahek Mistry, Kunal Singh Faculty involved: Vikas Chandrakar	To evaluate the efficacy of Mosqhit, a product developed at SRISTI for repelling Mosquito	SRISTI BIRAC , Govt. of India	Submitted
8.	Ms. Ria Anjaria and Ms. Megha Patel Faculty involved: Kushal Gohel	To evaluate the efficacy of Care & Care (a product developed at SRISTI) for cracks in heels	SRISTI BIRAC , Govt. of India	Submitted
9.	Dr. Jasmin Jasani Professor, Dept. of Pathology, SBKSMI&RC	Study of Biochemical parameters in sickle cell anemia	SVRFS	Sanctioned
10.	Dr. Himani Pandya Tutor, Dept. of Microbiology, SBKSMI&RC	Prevalence of <i>Chlamydia tracomatis</i> infection in the symptomatic females attending Gynecology unit at Dhiraj Hospital, Piparia.	SVRFS	Sanctioned
11.	Dr. Tejas Shah Assistant Prof., Dept. of Cardiology, SBKSMI&RC	A Study on Lipoprotein A Level in Adult with Acute Coronary Syndrome	SVRFS	Sanctioned

Appointments



a. Patent Attorney for Sumandeep Vidyapeeth

Research Cell has joined the hands with a Patent attorney Mr. Bhavik Patel, INFINVENT IP, Vadodara for providing

- Awareness about the rights of intellectual property (IP) in educational, research, clinical and other activities of Hospitals and other institutes of SVDU
- Guidance in patent filing activities in professional manner

b. Research Associate

- Ms. Nimisha Patel, will be associated with research related and other relevant work .

c. Research Assistant

- Mr. Ronak Shah, for Clinical trials and Biostatistics Analysis

d. Research Clerk

- Mr. Nirav Parikh, for clerical office work

— We are Acknowledge Mr. **Nirav** Darji for Technical Support in Development of this Newsletter .

