www.nmims.edu



#### SUNANDAN DIVATIA SCHOOL OF SCIENCE

# CONVOCATION & ROSTER OF EVENTS 2015







## Message from Chancellor

The SVKM's NMIMS Sunandan Divatia School of Science is driven by creativity, curiosity and imagination and offers highly innovative and unique interdisciplinary programs. The focus of the School is to create and develop a pool of qualified scientific talent who will fulfil the needs of premier research organizations as well as the demands in an industry setting. True to its spirit, this academic year the School has introduced a new undergraduate program in Applied Statistics and Analytics, to prepare students to face challenges in handling "Big Data". Today, one of the major issues facing various sectors - be it banking, insurance, retail, and even in healthcare, is capturing large amounts of information electronically and successfully transforming the data to solve business problems. The newly launched program is addressed to focus on the applications of analytics to leverage business decisions.

Innovation in Science is the most important parameter contributing to the discoveries, development and growth. I urge you all to keep the innovation engine running which is the key to Nobel Prize - winning research. Science has no boundaries and research is only limited by imagination.

I wish you success with all your initiatives and trust that you will utilize the enriching learning experience at the University, in the pursuit of excellence.

6

Shri Amrish Patel Chancellor

## **Board of Management**

#### Chairperson

Shri. Amrish Patel Chancellor

#### Members

Dr. Rajan Saxena Vice Chancellor

Dr. M. N. Welling Pro- Vice Chancellor

Dr. Sharad Mhaiskar Dean, MPSTME

Shri. K. Venkataramanan CEO & MD, L & T Ltd.

Dr. M. R. Rao Dean, Emeritus, ISB

Shri Pankaj R. Patel Chairman & Managing Director, Zydus Cadila Shri Pravin Gandhi Sr.Vice President, SVKM

Shri T. N. V. Ayyar Management Trustee, SVKM

Dr. Meena Galliara Director – Center For Sustainability Management and Social Entrepreneurship

Dr. Bala Krishnamoorthy Associate Dean, SBM

Shri Ashish Apte Controller of Examinations

#### Non Member Secretary

Dr. Meena Chintamaneni

### **Our Vision**

NMIMS will define the 21st Century Technological, Management and Organisational Research and educate with a view to impact global developments and building a cadre of employable individuals.

## **Our Mission**

NMIMS' mission is to provide to the nation, good quality trained human resources who are socially sensitive, have inquisitive minds and the persistence to change their own and the organisation's lives, and contribute to making India a knowledge super power and the world a better place to live.

This we seek to achieve through educational excellence, innovative and relevant research, promoting social equity and an outreach program to ensure global access of our learning resources to all students and faculty.

## **Our Belief**

We believe that learning is most fruitful, when knowledge and expertise of individuals from various disciplines and diverse backgrounds are shared. As this provides a cutting edge to professional education, we encourage such diversity, which is reflected in the composition of the student body of the University.

We also believe that innovation is the key to progress in the modern world, so in our pursuit of excellence, we constantly upgrade and add newer areas of education and research to make our programs more relevant to the stakeholders. Most importantly, we believe that openness, participation and fairness are necessary for building a culture conducive to learning and growth.

### Message from Vice-Chancellor

SVKM's NMIMS, after becoming a University expanded its horizons and in a conscious effort to foray to newer disciplines, NMIMS has established several schools, the Sunandan Divatia School of Science, being one of them. The University envisioned the need to venture into the domain of Sciences and introduced highly innovative and unique interdisciplinary courses. The vision of the School is "To be globally recognized as a premier Science Research Institution offering a memorable learning experience".

In Science & Technology, some of the major challenges we are faced with are- access to state-of the-art infrastructure; ensuring excellence; keeping abreast with newer technologies and innovation in research. Further, what is also equally important is leveraging science and technology to address problems specific to the Indian context. Fundamental research is an absolute requirement but translational research is even more rewarding and the need of the hour, moving one step closer to addressing real-life problems. This year, the School has introduced the first of its kind and comprehensively structured undergraduate program in Applied Statistics and Analytics.

I am happy to note that the School is engaged in cutting edge research, which has led to peer reviewed publications. Further, the Biomedical Research Journal published by the School has been receiving excellent research articles and the School has entered into National and International collaborative research with renowned Scientists and academicians, thus moving towards creating a global impact.

I am sure that the Sunandan Divatia School of Science, will move ahead with passion and drive in the coming years, following NMIMS's rich tradition of innovation and commitment to society.

My best wishes to the graduating students.

Dr. Rajan Saxena Vice-Chancellor





## Message from Dean

I am delighted to welcome you to the 2015 Convocation of the SVKM's Sunandan Divatia School of Science. This is celebration time for the graduating students. Obtaining a degree is definitely a matter of pride and happiness. The goal of Sunandan Divatia School of Science is to be a Center of Excellence in the domain of Pure and Applied Sciences by providing quality education and basic/applied research. The seven years history of the School is indicative of the continuous physical and academic growth. It is a matter of great satisfaction that, within a short period of seven years, the School has established traditions of excellence, selfconfidence and competence among the students with a focus on meaningful learning and research-oriented approach. On the research front, the School is geared to focus on several emerging areas of innovative research and development in the life sciences and biotechnology space. Our studies have led to peer reviewed publications. We have entered into collaborative research with two premier Institutions in Germany in the area of NanoSciences and its biomedical application. The forms of co-operation that will be pursued are visits by or exchange of doctoral students and faculty members for research.

Our students have actively participated in National and International Conferences and won awards. Several students have done us proud by securing National Level fellowships. Our students have secured excellent summer as well final placements in some of the choicest Organizations.

Besides, we have inculcated social consciousness and are committed to creating social awareness as an on-going activity for our students. This year we have continued our work on -Thalassemia screening, Blood donation drives and the National Initiative, Swacch Bharat Abhiyan.

We also organized our first alumni meet this year for networking, relationship building and to strengthen ties with our alumnus.

Lastly, there was a recent development of renaming the school to Sunandan Divatia School of Science in honor of the services rendered by Shri Sunandan Divatia, Honorary Secretary, Shri Vile Parle Kelavani Mandal, to the trust.

I offer congratulations to the passing postgraduates and doctoral students and anticipate that they would be warmly welcome in the professional circles. I also expect that they will accept their new responsibilities and earn a good name for themselves and for their University.

Dr. Aparna Khanna Dean



## Profile of Chief Guest

Mr. Vijay Chandok is designated President at ICICI Bank. His responsibilities involve overseeing International Banking and Small and Medium Enterprises and Agri groups in ICICI Bank. These businesses are spread over 16 countries including UK, Canada, USA, Singapore, UAE, Hong Kong and India. Assets of these businesses together constitute about 25% of the banks total Assets.

Under his leadership, ICICI Bank has won several awards:

- Best Borrower from India by FinanceAsia for two consecutive years (2012 and 2013).
- Best Private Sector Bank in Global Business Development, SME financing 2012 by Dun & Bradstreet.
- Best Private Sector Bank Global Business Development 2012 by Dun & Bradstreet.
- Best Bank in Private sector for International Business
   Development in 2011 by Dun & Bradstreet.
- Best SME Bank India 2011 by Asian Asset Awards (Triple A)
- Canada's Top 100 Employers 2011 Finalists
- Consumer Moneyfacts Award 2011 in UK for Best Online Savings Provider
- Asian Banker Award for Excellence in SME Banking in Asia Pacific, Central Asia and Gulf Region in 2009
- India's best SME Bank in 2008 by Dun & Bradstreet

He has about 2 decades of experience in Banking. He is currently on the Board of ICICI Bank Canada, ICICI Bank UK PLC and ICICI Investment Management Co. Ltd. and a member of the Executive Management of ICICI Bank Ltd.

## List of Participants

### M.Sc. Statistics

Nandini A.	Smita Bhingarde	Gaurav Chettiyar	Chaitali GadPrasun Gosh
Ravikumar Jain	Sachin Singh	Kalpesh Lakhan	Meghna Mazumdar
Sayalee More	Akshay Sawant	Parita Shah	Palak Singh
Siddhi Toraskar			

#### M.Sc. Biological Sciences

Sujata Singh

Jay Waghela

#### M.Sc. Chemical Sciences

Bhavana Krishnamurthy

## Master of Physiotherapy

Priyanka Agarwal	Nirjara Bhayani	Moksha Gala	Sneha Jariwala			
Rashmi Khanapurkar	Pritika Lalwani	Bhavinibahen Mahida	Dhara Mehta			
Kritika Poddar	Ayesha Shaikh	Sabah Thaver				
				-		
Ph.D. Biological Sciences						

Animesh Deval Rita Mehta Viraj Gala Harita Parikh

Riddhi Jholapara Vinita Apraj Radhika Mehta Sweta Jha

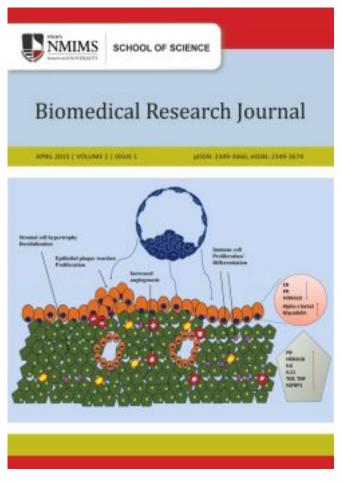
## National Level Scholarships for Doctoral Students

Ms. Maneka Hoonjan, Ph.D. student, Biological Sciences, receives the "Maulana Azad National Fellowship for Minority Students" for the year 2014-15 from the University Grants Commission (UGC), for a period of five years.

## In-house peer reviewed open access journal 'Biomedical Research Journal'

The third issue of the 'Biomedical Research Journal (BRJ)' (Volume 2, Issue 1) was released on 25th April 2015. BRJ is a premier peer reviewed open access journal, published twice in a year by Sunandan Divatia School of Science, NMIMS (Deemed-to-be) University, Mumbai, for promoting the advancement of ideas in the interdisciplinary realms of Medicine, Science and Technology. The goal is to share new discoveries and translational knowledge with scientists, academicians, clinicians and students in the field of Biomedical and Biological/Chemical/ Biotechnology/Stem Cell Biology/Cancer Biology in the realm of basic and applied aspects in the different areas.The journal is indexed with Google Scholar, HINARI, CiteFactor, DRJI and EBSCO.

BRJ aims at creating a platform to help advance the domains and frontiers of inter- and multi-disciplinary research across the various areas of sciences and recent advances in cross pollination across biology, chemistry and medicine. Integrative science is the present and future of science, and the various aspects of the journal proposes to highlight and emphasize contemporary technology towards understanding various aspects of the sciences.



The initial focus areas of BRJ include review articles and original research papers in cancer biology, stem cell biology, nano-technology and phytochemistry.

The first issue of 'Biomedical Research Journal' was released on 21st April 2014 at a function organized at the Juhu Jagruti Hall, Mithibai College, Vile Parle (West). The journal was inaugurated by Dr. Jayant Gandhi, Honorary Joint Secretary, SVKM. Dr. Rajan Saxena, Vice Chancellor, NMIMS, gave the inaugural address followed by keynote address by Dr. Prakash C. Gupta, Director, Healis Sekhsaria Institute for Public Health, Mumbai.

## Network / Linkages

Our doctoral student, Ms. Delina Joseph, working under the mentorship of Dr. Sudeshna Chandra, Associate Professor, Department of Chemistry, has been selected for a research visit for a period of three months at Technische Universitat, Chemnitz, Germany. Under the InProTUC program, Ms. Delina will be provided scholarship towards her staying expenses.

Delina will be working in the lab of Prof. Dr. Heinrich Lang, Department of Inorganic Chemistry, with whom Dr. Sudeshna is pursuing collaborative research.

The project is promoted by the German Academic Exchange Service and funded by the Federal Ministry for Education and Research (BMBF).

Name of the Author	Patent No. & Country	Title of the Patent	Status of the patent	Year
Nancy Pandita, Vinita Apraj	684/MUM/2014, India	Isolation And Identification Of Bioactive Compounds From Ocimum Tenuiflorum Linn For Acne Vulgaris	Complete specification filed	2014- 15
Nancy Pandita, Vinita Apraj	685/MUM/2014, India	Isolation And Identification Of Bioactive Compounds From Citrus Reticulata Blanco For Acne Vulgaris	Complete specification filed	2014- 15
Nancy Pandita, Vinita Apraj	687/MUM/2014, India	Determination Of Withaferin A In Rat Plasma By High Performance Thin Layer Chromatography (HPTLC) Method	Complete specification filed	2014- 15



# Paper / Articles published in National / International Journals during the academic year

- 1. Shalia K, Saranath D, Shah VK. Peripheral blood mononuclear cell ABCA1 transcripts and protein expression in acute myocardial infarction. Journal of Clinical Laboratory Analysis. 2014;29 (3):242-249.
- 2. Parikh H, Pandita N, Khanna A. Phytoextract of Indian mustard seeds acts by suppressing the generation of ROS against acetaminophen-induced hepatotoxicity in HepG2 cells. Pharmaceutical Biology. 2015;53(7):975-984.
- 3. Chandra S, Noronha G, Dietrich S, Lang H, Bahadur D. Dendrimer-magnetic nanoparticles as multiple stimuli responsive and enzymatic drug delivery vehicle. Journal of Magnetism and Magnetic Materials. 2015;380:7-12.
- Yele VU, Desai K. A new thermostable and organic solvent-tolerant lipase *Fromstaphylococcus warneri*; optimization of media and production conditions using statistical methods. Applied Biochemistry and Biotechnology. 2015;175(2):855-869.
- 5. Chakrabarti S, Multani S, Dabholkar J, Saranath D. Whole genome expression profiling in chewing-tobacco associated oral cancers: A Pilot study. Medical Oncology. 2015;32(3):60.
- 6. Chandra S, Patel MD, Lang H, Bahadur D. Dendrimer-functionalized magnetic nanoparticles: A new electrode material for electrochemical energy storage devices. Journal of Power Sources. 2015;280:217-226.
- 7. Sanganeria P, Chandra S, Bahadur D, Khanna A. Effect of HSA coated iron oxide labeling on human umbilical cord derived mesenchymal stem cells. Nanotechnology. 2015;26(12):125103.
- 8. Malhotra S, Welling MN, Mantri SB, Desai K. *In vitro* and *in vivo* anti-oxidant, cytotoxic and anti-chronic inflammatory arthritic effect of selenium nanoparticles. Journal of Biomedical Materials Research: Part B Applied Biomaterials. 2015; DOI: 10.1002/jbm.b.33448.
- 9. Savai J, Varghese A, Pandita N, Chintamaneni M. Investigation of CYP3A4 and 2D6 Interaction of Withania somnifera and Centella asiatica in Human Liver Microsomes. Phytotherapy Research. 2015;29(5):785-790.
- 10. Vora A, Londhe V, Pandita N. Herbosomes enhances the in vivo antioxidant activity and bioavailability of punicalagins from standardized pomegranate extract. Journal of Functional Foods. 2015;12:540-548.
- 11. Savai J, Pandita N, Chintamaneni M. Investigation of cyp1a interaction potential of withania somnifera in rat and human liver microsomes. International Journal of Pharmacy and Pharmaceutical Sciences. 2015;7(2):273-278.
- 12. Savai J, Pandita N, Chintamaneni M. Simultaneous determination & validation of two different withanolides in withania somnifera using various chromatographic techniques. Indo American Journal of Pharmaceutical Research. 2014;4(11):5449-5458.
- 13. Gala V, Desai K. Plant based quorum sensing inhibitors of Pseudomonas aeruginosa. International Journal of Pharmacy and Pharmaceutical Sciences. 2014;6(8):20-25.
- 14. Mishra R, Pandit K, Bhagwat AM, Brijesh S. Antihyperlipidemic activity of alcoholic extracts of Trichosanthes anguina in Triton WR 1339 induced hyperlipidemic rats. International Journal of Pharmaceutical Science and Research. 2014;5(10):4269-4274.
- 15. Pandit K, Mishra R, Brijesh S, Bhagwat A, Bhatt P. Lipid lowering activity of Feronia limonia leaf in Triton WR-1339 induced hyperlipidemic rats. International Journal of Pharmacy and Pharmaceutical Science. 2014;6(8):156-158.
- 16. Parikh H, Khanna A. Pharmacognosy and phytochemical analysis of Brassica juncea seeds. Pharmacognosy Journal. 2014;6(5):47-54.
- 17. Agrawal V, Bhagwat AM, Sawant CS. Sesame oil incorporated medium for isolation and enumeration of lipophilic yeasts. International Journal of Pharmaceutical Sciences and Research. 2014;5(7):2972-2979.
- 18. Jadhav V, Sachar S, Chandra S, Bahadur D, Bhatt P. Synthesis and Characterization of Arsenic Trioxide Nanoparticles and their *in vitro* cytotoxicity studies on mouse fibroblast and prostate cancer cell lines. Journal of Nanoscience and Nanotechnology. 2015 In Press.

# Summer Internship Projects

Name	Торіс	Place
Nandini Ananthanarayanan	Delayed Information Flow And Current Macroeconomic Analysis : An Assessment	RBI, Mumbai
Smita Bhingarde	SBI General Exposure Analysis Using Geospatial Data ; Competitive Market Analysis In Indian General Insurance Industry	SBI General Insurance, Mumbai
Gaurav Chettiyar	Long Term Investment Model And Intra-Week Trading Model For Derivative Market.	Derivados Consulting Pvt.ltd, Mumbai
Chaitali Gad	Analysis Of Conversion Ratios In Teleshopping	Ananto Analytics, Mumbai
Prasun Ghosh	Open Source Intelligent Solution For Defence Ministry (Text Analytics), Sentiment Analysis Of Various Segments Of Cars Of Tata Motors.	SAS INDIA, Mumbai
Ravi Jain	To Analyse The Bike Sales Across Different Customer Demographics And Find Sales Pattern And Trend.	Ananto Analytics, Mumbai
Sachin Singh	Market Segmentation For Hotel Industry.	Ananto Analytics, Mumbai
Kalpesh Lakhan	Introduction Of Bank.	Dena Bank, Mumbai
Meghna Mazumdar	Analysis Of Assets And Liabilities Portfolio Of Banks In India Over Last Ten Years	RBI, Mumbai
Sayalee More	Inflation Expectation Survey Of Households	RBI, Mumbai
Akshay Sawant	SBI General Exposure Analysis Using Geospatial Data ; Competitive Market Analysis In Indian General Insurance Industry	SBI General Insurance , Mumbai
Parita Shah	Analysing And Forecasting Monthly Claim Frequency In Motor Insurance	Reliance General Insurance, Mumbai
Palak Singh	To Develop A Potential Strategy For Customer Acquisition In Semin Urban And Rural Markets By Understanding The Customer Buying Behaviour Of Durable Goods.	Big Vue Consulting, Delhi
	To Analyse The Bike Sales Across Different Customer Demographics And Find Sales Pattern And Trend.	Ananto Analytics, Mumbai
Siddhi Toraskar	Effect Of Corporate Profitability On Economic Growth	RBI, Mumbai

# Institute / Corporate Projects

Name of the Students	Name of the programme	Name of the Company/ Research Ogranisation	Title of the Project	Name of the Mentor
Nandini A, Akshay Sawant & Chaitali Gad	M.Sc. Statistics	ldea Cellular Pvt. Ltd.	Churn Analysis In The Telecom Industry	Mrs. Leena Kulkarni & Mr. Sudeepta Chaudhuri
Parita Shah & Prasun Gosh	M.Sc. Statistics	Future Generali	Detecting Fraud In Motor nsurance Using Data Analytics Techniques	Dr. Sunita Mall, Mr. Amul Desai & Mr. Jitendra Tawde
Gaurav Chettiyar, Smita Bhingarde & Kalpesh Lakhan	M.Sc. Statistics	Brandscapes Worldwide	Launching A New Bathing Soap Brand In Indian Market	Mrs. Leena Kulkarni, Mr. Viswanat han Subramanian & Prof. Mahulikar
Saylee More, Siddhi Toraskar & Ravi Kumar Jain	M.Sc. Statistics	AxionConnect InfoSolutions Pvt. Ltd.	Credit Risk Management In Financial Institutions	Dr. Sunita Mall, Mr. Tarun Soni & Prof. Mahulikar
Meghna Mazumdar, Palak Singh & Sachin Singh	M.Sc. Statistics	Federal Bank	To Develop Probability Of Default Model For Auto Loans To Predict The Customers Who Are Going To Default In Next 45 Days	Prof Sunil Shirvaiker, Mr. A mul Desai & Mr. Jitendra Tawde
Bhavna Krishnamurthy	M.Sc. Chemical Sciences	Bhabha Atomic Research Centre (BARC)	Supramolecular Interaction of Biologically Important Acridine Orange Dye With Cyclodextrin Macrocyclic Host & Natural DNA: A Photophysical Investigation	Dr. Haridas Pal & Dr. Mhejabeen Sayed
Sujata Singh	M.Sc. Biological Sciences	SRL Limited	Replication study of promoter polymorphism in the delta-globin gene: A marker of the Arab-Indian haplotype	Dr. Aparna Bhanushali
Jay Wagehla	M.Sc. Biological Sciences	Indian Institute of Science Education & Research (IISER), Pune, India	Effect of micro-habitats on ant communities in a lowland tropical forest in Arunanchal Pradesh	Mr. Ramana Athreya

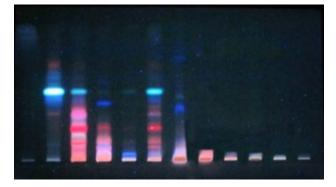
## Selected Research Projects

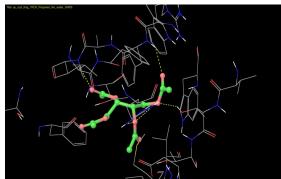
#### Evaluation of the anti-quorum sensing activity of Indian medicinal plants against certain Gram negative pathogens: *Viraj Gala & Dr. (Mrs) Krutika Desai*

The emergence of antimicrobial resistance among the nosocomial pathogens such as Pseudomonas aeruginosa and Acinetobacter baumannii poses a major threat to the health of hospitalized patients. The few antibiotic options left for the infection therapy necessitate the development of new antimicrobial drugs. Virulence of the organism is an important antimicrobial target, since controlling virulence can deprive bacteria of its infection capability, and provide with less likelihood of drug resistance. Acyl-homoserine lactone (Acyl-HSL) based Quorum sensing (QS) is known to regulate virulence and biofilm maturation in the above organisms; hence, inhibition of QS will help to control their pathogenicity.

In the study, five plants, Rubia cordifolia, Tinospora cordifolia, Picrorhiza kurroa, Cassia fistula and Bauhinia variegata were screened for QS inhibition. Phytochemical extraction was obtained by using two methods, cold maceration and hot soxhlation, and with four solvents of different polarity, water, methanol, ethyl acetate and n-hexane. The activity of the different plant extracts against short and long acyl-HSLs in both the pathogens was tested using biomonitor organisms, Chromobacterium violaceum ATCC12472 and Escherichia coli MG4/pKDT17 respectively. Among all the plants studied, the ethyl acetate extracts of T. cordifolia inhibited short as well as long acyl-HSLs in P. aeruginosa and A. baumannii. Further, absence of antibacterial activity of the plant extract confirmed its QS inhibitory potential. Next, the cold ethyl acetate extract of T. cordifolia was examined for its effect on virulence factors such as LasA protease, LasB elastase and pyocyanin as well as biofilm development in the wild type and clinical strains of *P. aeruginosa* and *A. baumannii*. The plant extract significantly (P<0.05) inhibited all three virulence factors in P. aeruginosa; it exhibited enhanced biofilm formation in P. aeruginosa, but significantly decreased biofilm development in A. baumannii. However, when fractions of the plant extract, obtained from column chromatography, were assessed, the most active fraction was able to suppress biofilm formation of *P. aeruginosa*. Furthermore, the active fraction was characterized using GC-MS and HPTLC; and the detected compounds were then analyzed with in silico testing for binding to the P. aeruginosa Lasl and LasR proteins. The probable anti-QS compounds were predicted to be 2,3,4-triacetloxybutyl acetate, methyl 16-methyl heptadecanoate, 2-(5-ethenyl-5-methyloxolan-2-yl) propan-2-ol, methyl hexadecanoate and 2-methoxy-4-vinyl phenol.

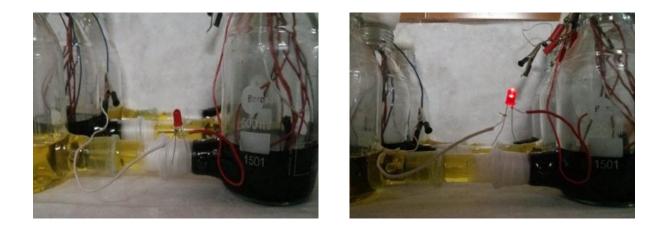
The study revealed the presence of anti-QS activity in the plant, *Tinospora cordifolia*, for the first time, and unveiled its potential in further regulating bacterial virulence and biofilm formation. It also predicted the QS inhibitors present in the bioactive fraction of the plant extract, which provide new molecules for future studies.

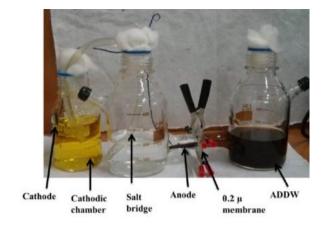




#### Generation Of Electricity From Waste Using Microbial Fuel Cell: Animesh Deval & Dr. A. K. Dikshit

Environmental issues related to energy and waste, are the two biggest problems which cannot be overlooked. There is mismanagement of waste which is causing irreversible damage to the environment. For energy, there is still very much dependency on non-renewable sources. These two environmental concerns can be handled in one go by Microbial Fuel Cell (MFC). MFC is a device which converts chemical energy from organic matter directly into electrical energy using microorganisms as catalyst. In this study, two chambered MFC was constructed and anaerobically digested distillery wastewater (ADDW), a wastewater generated after biogas formation, was used to extract further energy using endogenous microflora. The optimization of MFC was performed using Box-Behnken Design. Surface area of cathode of 18.42 cm<sup>2</sup>, pH of 8.3, resistance of 1000 ? without addition of antifoam and aeration at cathode were found to be optimum. Surface area of anode showed linear increase in the power generation from 6.14 cm<sup>2</sup> to 55.26 cm<sup>2</sup>. The power output of optimized MFC was amplified by keeping 4 MFCs in series, which could generate about 2.1 V and sufficient to glow LED. During initial stages, acid was getting accumulated from glucose fermentation without generation of electricity and electricity was being generated from acetate utilization instead of glucose which was confirmed with the help of GC analysis. Scanning electron microscopy showed prominent biofilm on the surface of anode over a period of 50 h. The biofilm showed presence of three different culturable anaerobes belonging to genus Clostridia and presence of Bacillus sp. licheniformis, Pseudomonas sp. and Corynebacterium freiburgense analyzed by DGGE. The mechanism of transfer of electrons was analysed by modified U-tube MFC and cyclic voltammetry and it was confirmed the indispensable role of biofilm in the direct transfer of electrons by Clostridium sp.



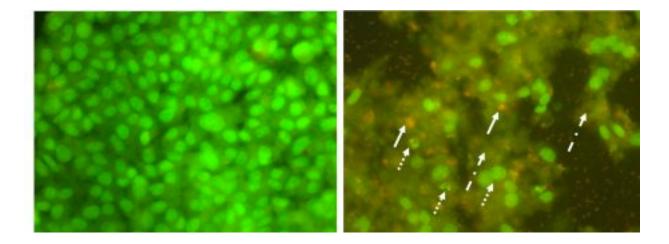


# Isolation and characterization of phytoconstituents for *in vitro* evaluation of hepatoprotective activity using cell line: *Harita Parikh & Dr. Aparna Khanna*

Liver plays a central role in detoxification and excretion of many endogenous and exogenous compounds which also makes it susceptible to drug induced injury. Some of the drugs, their metabolites and various chemicals are toxic to hepatic cells and induce various injuries. Herbal medicines are beneficial against liver disorders, as measured by standard liver function tests as they support or promote the process of regeneration of liver cells with fewer side effects.

The present study was undertaken to investigate hepatoprotective role of *Brassica juncea* on acetaminophen (APAP) induced hepatic damage *in vitro*. As there are few reports available on this activity in mustard seeds; the present study was designed to investigate the hepatoprotective potential of seeds of *B. juncea* with a broad-based characterization of the antioxidative property, and detection of its phytoconstituents using multiple detection systems to elucidate the probable mode of protection.

*Brassica juncea* hydroalcoholic extract (BJHAE) exhibited antioxidant activity against 2,2-diphenyl-1-picrylhydrazyl (DPPH), superoxide, 2,2'-azino-bis(3-ethylbenzothiazoline-6-sulphonic acid (ABTS) and oxygen radicals (ORAC assay) with iron chelating capacity (FRAP assay). The presence of sinigrin, quercetin, vanillin, catechin and vitamin e was detected by HPTLC and HPLC techniques. The pre-treatment and post-treatment models of hepatotoxicity were established by APAP. Exposure of 20 mM APAP for 24 h resulted in cytotoxicity causing significant cell death and elevation of liver indices establishing the *in vitro* models of hepatotoxicity. Our results showed that 700  $\mu$ g/mL BJHAE post-treatment and 1000  $\mu$ g/mL BJHAE pre-treatment, for 24 h resulted in significant protection against APAP damage with increased cell viability and lowering the leakage of AST, ALT, GGT and ALP (p < 0.05). The results also indicates that vitamin e, quercetin and catechin present in BJHAE contribute to the hepatoprotection. Further, the detection of reactive oxygen species (ROS) indicated that BJHAE also suppressed the extensive generation of ROS and restores the normal cell cycle, altered as a result of APAP damage indicating antioxidant as a probable mode of hepatoprotection.



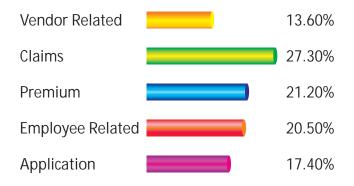
## Selected Industrial Projects

#### Fraud Analytics in Motor Insurance: Prasun Gosh, Parita Shah, Dr. S. Mall & Mr. Amul Desai

Fraud is a menace which has to be dealt with an iron hand. Frauds in insurance are typically where a fraudster tries to gain undue benefit from the insurance contract by ignorance or wilful manipulation. The study aims to determine whether a particular incoming claim in future should be accepted or rejected.

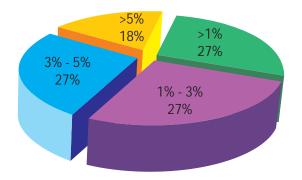
Using the claims back end data in motor insurance obtained by a Mumbai based insurance company from the period of 2007-2014, this study focuses on studying the pattern exhibited by those claims which have been rejected and accepted as well. The prime objective of the study is to identify the important or the significant triggers which could play a vital role in rejection or acceptance of any future claim & further develop an algorithm using these significant triggers.

The methodology for measuring fraud here is based on both conventional and new approaches like Logistics regression, CHAID analysis, Decision tree and Confusion matrix. This study makes use of statistical techniques like logistic regression & CHAID (Chi Square Automatic Interaction Detection Technique) to determine the probability of rejection & acceptance of each and every claim coming in future. Data mining techniques like decision tree is used on the important parameters to find all possible combinations of these significant variables and the bucket for each combination. Using these probability values for each bucket and the threshold value decided by the company the decision on acceptance or rejection of the claim is taken.



#### FRAUD RISK EXPOSURE

#### INCREASE IN COST DUE TO FRAUD



#### Actionable Churn Prediction in Telecom: Nandini A, Akshay Sawant, Chaitali Gad, Mrs. L Kulkarni & Mr. Sudeepta Chauduri

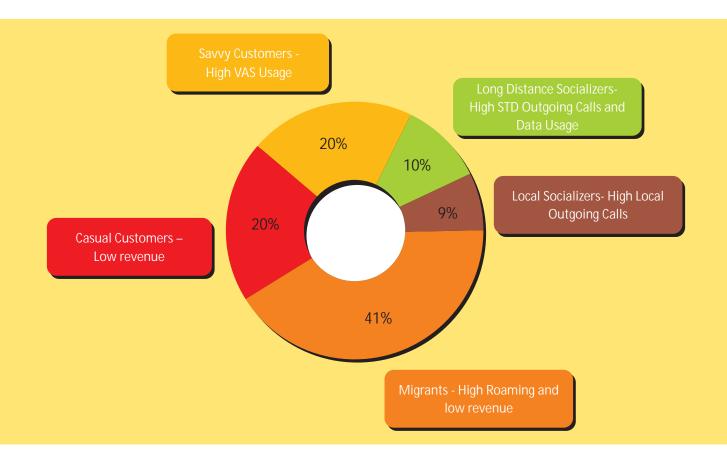
Telecom sector in the country is stifled with intense competition between the different service providers. With low costs and no penalties customers often switch from one service provider to another. Due to which the churn behavior must be studied and predicted. A churner is a customer who is likely to leave the service of the company.

The objective of the project was to provide more actionable insights of the subscribers by segmentation so they can be targeted for advertising so as to control churn. Furthermore there is also a need to identify and reduce the number of churners by better prediction. This is done by creating homogenous segments of subscribers by taking into consideration more variables, which is redefining the current segmentation and building churn prediction models for each of the new segments to compare with original model.

Cluster Analysis and Logistic regression were the techniques employed in the project. Data consisted to calling, message and other details of 5 Lakh prepaid subscribers of the Mumbai base. The three month data of the subscribers along with 57 field values amounted to about 20GB of space.SAS Enterprise Guide and SAS Enterprise Miner were used for the same.

These subscribers were classified into five segments based on their usage patterns and behavior. The final segment of subscribers is as follows.

The models thus creating helped in providing the management more information about the subscriber by just referring to the segment itself. Also similar marketing strategies could be applied to subscribers falling into the same segment. The overall accuracy and capture of the new model was considerably better than the existing model. Hence the approach suggested was also explicitly deployed in the company.



# Paper Presentations at International / National Conferences

Name of the author (s)	Presenting author	Title of the paper	Name of the conference	Organising body	Date/ Year	Venue of the conference
Swati Chitrangi, Aparna Khanna	Swati Chitrangi (awarded best poster)	Survival and Function of Human Umbilical Cord Mesenchymal Stem Cell- Derived Hepatocyte-like cells (HLCs) on a Novel Three- Dimensional Scaffold	Biomaterials 2014- International conference on polymeric biomaterials, bioengineering and biodiagnostics	IIT Delhi, India; ENEA Rome Italy; National Research Council of Italy	October 27- 30, 2014	IIT Delhi, New Delhi
Akshata Raut, Aparna Khanna	Akshata Raut (awarded best oral)	Modification of histone acetylation facilitates in vitro hepatic transdifferentia tion of human mesenchymal stem cells.	5th International Conference on stem cells and Cancer (ICSCC- 2014)	International Centre for Stem Cells, Cancer & Biotechnology (ICSCCB, Pune)	November 08-10, 2014	Delhi
Shreelekha Dutta, Aparna Khanna	Shreelekha Dutta (oral)	Apoptotic effect of isoflavones and lignans in MCF7 breast cancer cells	4th Biennial International Conference on Drug Discovery from Natural Products and Traditional Medicines (DDNPTM- 2014)	NIPER, Mohali	November 20-22, 2014	NIPER, Mohali
Samira Kargutkar, Brijesh S.	Samira Kargutkar (poster)	<i>In vivo</i> anti- arthritic activity of peels of <i>Ananas</i> <i>comosus</i> using Freund's adjuvant induced arthritis in rats	4th Biennial International Conference on Drug Discovery from Natural Products and Traditional Medicines (DDNPTM- 2014)	NIPER, Mohali	November 20-22, 2014	NIPER, Mohali

Name of the author (s)	Presenting author	Title of the paper	Name of the conference	Organising body	Date/ Year	Venue of the conference
Amruta Tambe, Nancy P.	Amruta Tambe (poster)	Phytochemical evaluation of <i>Boswellia</i> <i>serrata</i> extracts and identification of its bioactive compounds	4th Biennial International Conference on Drug Discovery from Natural Products and Traditional Medicines (DDNPTM- 2014)	NIPER, Mohali	November 20-22, 2014	NIPER, Mohali
Madhuri Vaghela, Nancy P.	Madhuri Vaghela (poster)	Pharmacognost ic, Phytochemical studies and isolation of gymnemic acids from <i>Gymnema</i> sylvestre R. Br.	4th Biennial International Conference on Drug Discovery from Natural Products and Traditional Medicines (DDNPTM- 2014)	NIPER, Mohali	November 20-22, 2014	NIPER, Mohali
Ashlesha Vaidya, Nancy P.	Ashlesha Vaidya (poster)	Phytochemical analysis of Butea monosperma and Cassia absus extracts	4th Biennial International Conference on Drug Discovery from Natural Products and Traditional Medicines (DDNPTM- 2014)	NIPER, Mohali	November 20-22, 2014	NIPER, Mohali
Miloni Thakkar, V.K. Aswal, Brijesh S.	Miloni Thakkar (poster)	Probing the effect of cholesterol on the self- assembly of some non-ionic surfactants by small-angle neutron scattering	5th International Conference on Neutron Scattering (CNS- 2015)	Bhabha Atomic Research Centre, Trombay	February 02-04, 2015	Homi Bhabhai Centre for Science Education

Name of the author (s)	Presenting author	Title of the paper	Name of the conference	Organising body	Date/ Year	Venue of the conference
Mugdha Kunte, Dr. Krutika D.	Mugdha Kunte (poster)	Study of Inhibitory effect of C- Phycocyanin complex on human matrix metalloprotein ases	International Conference on Molecular Pathways to Therapeuics: Paradigms and Challenges in Oncology	Carcinogenesi s Foundation (USA) and ACTREC,	February 11-13, 2015	ACTREC- Tata Memorial Centre , Kharghar (Navi Mumbai)
Sagar Chhabria & Dr. Krutika D.	Sagar Chhabria (awarded 2nd prize for poster)	Inhibition of pancreatic cancer cell line (MIA PaCa-2) by a novel approach : In- situ Allicin generation using targeted Allinase delivery	International Conference on Molecular Pathways to Therapeuics: Paradigms and Challenges in Oncology	Carcinogenesi s Foundation (USA) and ACTREC,	February 11-13, 2015	ACTREC- Tata Memorial Centre , Kharghar (Navi Mumbai)
Vaibhav Jadhav, Sudeshna Chandra, Dhirendra Bahadur, Purvi Bhatt	Vaibhav Jadhav (awarded best poster)	Arsenic Trioxide Nanoparticle Induces Caspase Dependent Apoptosis in LNCaP and PC- 3 Cells via Epigenetic Remodelling and CDKI Expression	International Symposium on Nanotechnology and Cancer Theronostics (ISNACT - 2015):	Department of Metallurgical Engineering and Material Science, IIT Bombay	February 19-21, 2015	IIT Bombay, Mumbai, India.
Brijesh S, Thakkar M, Patravale V, Aswal V	Miloni Thakkar (poster)	Niosomes as Multi-drug Delivery Systems for Anti-malarial Drugs	14th International Symposium On 'Advances in Technology and Business Potential on New Drug Delivery Systems'	Controlled Release Society - Indian Chapter	February 23-24, 2015	Institute of Chemical Technology, Mumbai

Name of the author (s)	Presenting author	Title of the paper	Name of the conference	Organising body	Date/ Year	Venue of the conference
Miloni Thakkar, Sunita Mall, Brijesh S.	Miloni Thakkar (poster)	Design of experiment approach for drug-drug interaction in- vitro	3rd International Conference on QbD in Pharma development- World Congress	Select Biosciences	April 16-18, 2015	Chandigarh
Divya Pillai, Dr. Nancy P.	Divya Pillai (poster)	Determination of quality standards for a poly herbal Ayurvedic formulation- Draksharishta (Oral Presentation)	Current Status, Challenges and Opportunities of Medicinal Plants and Natural Products .	UKA Tarsadia University	September 24-26, 2014	Surat
Priyanka Mokashi, Dr. Nancy P.	Priyanka Mokashi (poster)	Pharmacognost ic and phytochemical standardization of Enicostemma littorale blume (Oral Presentation)	Current Status, Challenges and Oppurtunities of Medicinal Plants and Natural Products .	UKA Tarsadia University	September 24-26, 2014	Surat
Sapna Biswas, Dr. Nancy P.	Sapna Biswas (poster)	Evaluation of the Proliferative Activity of alcoholic extract of Veteveria zizanioides Linn. in human Peripheral Blood Mononuclear Cells	1st Convention, SFE- India National Seminar on Opportunities in Medicinal Plant research	School of Natural Product Studies	November 29-30, 2014	Jadavpur University, Kolkata
Moksha Gala, Sneha Jariwala, Prachi Shah	Moksha Gala (poster)	Profile of injuries in Squash	IASMCON 2015	Indian Association of Sports Medicine	January 10-11, 2015	Mumbai

Name of the author (s)	Presenting author	Title of the paper	Name of the conference	Organising body	Date/ Year	Venue of the conference
Delina Joseph, Dr. Shilpee S.	Delina Joseph (oral)	Insights into the interactions of Magnetic Nanoparticles with Serum Proteins	National Conference on advances and innovations in Chemical Sciences (NCAICS -2015)	University of Mumbai	February 12-13, 2015	University of Mumbai
Subuhi Yete, D. Saranath	Subuhi Yete (poster)	Single Nucleotide Polymorphisms as biomarkers in Oral Cancer	34th Annual Convention of Indian Association of Cancer Research (IACR)	Indian Association of Cancer Research (IACR)	February 19-21, 2015	Jaipur
Sabah Thaver, Dr. Ali I.	Sabah Thaver (poster)	Effect of Virtual Reality Training on UL Rehabilitation in stroke patients	3rd Annual Conference of Indian Federation of Neuro Rehabilitation.	Indian Federation of Neuro Rehabilitation	March 07-09, 2015	Mumbai
Dhara Mehta, Dr. Ali I.	Dhara Mehta (poster)	Comparative Study between the effect of visual stimulation vs. rhythmic auditory stimulation on balance and gait in patients with Parkinson's Disease	3rd Annual Conference of Indian Federation of Neuro Rehabilitation.	Indian Federation of Neuro Rehabilitation	March 07-09, 2015	Mumbai
Rashmi Kulkarni, Dr. Ali I.	Rashmi Kulkarni (poster)	Effect of oral motor stimulation on neoru behavioural attaire of preterm infants	3rd Annual Conference of Indian Federation of Neuro Rehabilitation.	Indian Federation of Neuro Rehabilitation	March 07-09, 2015	Mumbai
Bhavini Mahida, Dr. Prachi S. , Dr. Ali I.	Bhavini Mahida (poster)	Effectiveness of Kinesiotaping in hand dysfunction in children with neurological disorders	3rd Annual Conference of Indian Federation of Neuro Rehabilitation.	Indian Federation of Neuro Rehabilitation	March 07-09, 2015	Mumbai

# Student participation in Scientific conferences / Workshops

Name of the conference/ workshop	Organizing Body	Name of Student/s	Programme/ Year / Div	Date
CSC Leaders for Students programme	BP & IIT Bombay	Prachi Hamlai, Maitreyee Pathare & Suman Patel	M.Sc. Statistics- 1st Year	August 04-07, 2014
Malhar Conclave	ST. Xaviers College	Sachin Singh & Ravi Kumar Jain	M.Sc. Statistics- 2nd Year	August 14, 2014
Workshop on Motor Relearning program for Stroke Rehabilitation A practical Approach	Sancheti Institute College of Physiotherapy, Pune	Dhara Mehta, Priyanka Agarwal, Rashmi Khanapurkar,Sabah Thaver, Bhavini Mahida	Master of Physiotherapy Trim IV II year	August 16-17, 2014
Robotics; Paradigm shift in Neuro Rehab	Kokilaben Hospital	Dhara Mehta, Priyanka Agarwal, Rashmi Khanapurkar,Sabah Thaver, Bhavini Mahida	Master of Physiotherapy Trim IV II year	August 31, 2014
IPA/EDQM 4th Technical Conference	IPA/EDQM	Mayuri Pillai, Krishna Deshpande	Research Scholar	September 10, 2014
Bio- medical communication skills impact on services, education and research	Medical Research Centre-Kasturba Health Society & Nanavati Superspeciality Hospital	Vaibhav Jadhav, Saniya Laheri, Maneka Hoonjan, Miloni Thakkar, Samira Kargutkar, Roshani Vyavaharkar	Research Scholar	September 27-28, 2014
Cerebral Palsy Symposium	Jupiter Hospital	Sabah Thaver, Priyanka Agarwal, Jigna Dagha, Ashwini Kadam	Master of Physiotherapy Part I & II	October 15, 2014
Open Day	ACTREC	Shruti Gadagakar, Niyati Mudliar, Abhishek Singh, Seema Bhatia, Chetan Patil, Ketaki Shinde, Shreya Pathak, Bhairavi Chavan, Pooja Shukla, Ashna Jain, Hetal Damani, Jagruti Sachanandani, Ruchita Shelat, Priyal Chikhaliwala	M.Sc. Biological Sciences & Pre Ph.D. Biological Sciences Part I	December 04, 2014

Name of the conference/ workshop	Organizing Body	Name of Student/s	Programme/ Year / Div	Date
Tata Open India International Challenge 2014	Tata, CCI	Moksha Gala, Bhagyashri Sheth	Master of Physiotherapy Part I & II	December 10-14, 2014
International Conference- Update Ayurveda 2014	Nair Hospital Mumbai	Samira Kargutkar, Priyanka Mokashi, Swati Sahoo	Research Scholars	December 11-13, 2014
11th Annual Workshop on "Cancer Rehabilitation	Tata Memori al Hospital	Pritika Lalwani, Ayesha Shaikh, Priyanka Agarwal, Rashmi Kulkarni, Sabah Thaver, Dhara Mehta, Bhavini Mahida	Master of Physiotherapy Part I & II	December 19-20, 2014
Functional Bracing In Orthopaedics	Department Of Orthopaedics, Dr. B. Nanavati Hospital	Forum Kacheria, Kavya Mehta, Pooja Kamble, Nishita Rana, Shivani Pandey, Mansi Doshi, Nikita Suvarna, Bhagyashri Sheth , Jigna Daga, Snigdha Karmokar, Ashwini Kadam, Priyanka Agarwal, Nirjara Bhayani, Moksha Gala, Sneha Jariwala, Rashmi Khanapurkar, Pritika Lalwani, Bhavinibahen Mahida, Dhara Mehta, Kritika Poddar, Ayesha Shaikh	Master of Physiotherapy Part I & II	December 24, 2014
IASMCON 2015	Indian Association of Sports Medicine	Pritika Lalwani, Pooja Mehta, Khadijeh Menai, Roli Dave	Master of Physiotherapy, Part II Ph. D. Physiotherapy	January 10-11, 2015
SCMM 2015	Standard Chartered	Nirjara Bhayani, Moksha Gala, Sneha Mehta, Kritika Poddar, Rashmi Kulkarni, Sabah Thaver	Master of Physiotherapy, Part II	January 18, 2015
ICU Workshop	K. J. Somaiya College of Physiotherapy	Forum Kacheria, Ashwini Kadam, Pooja Kamble, Nishita Rana	Master of Physiotherapy, Part I	January 22- 24, 2015
Workshop on Kinesiotaping. KT 1 & KT 2 Certification	HPE	Nirjara Bhayani, Kritika Poddar, Dhara Mehta, Sneha Jariwala, Bhagyashri Sheth	Master of Physiotherapy Trim III & V	February 07-08, 2015

Name of the conference/ workshop	Organizing Body	Name of Student/s	Programme/ Year / Div	Date
Pathways to Cancer	ACTREC	Saniya Laheri, Wendy D'souza, Subuhi Yete, Shaleen Multani, Shreelekha Dutta, Shruti Taparia, Maneka Hoonjan, Vaibhav Jadhav	Research Scholars	February 14, 2015
International Symposium on Nanotechnology and Cancer Theronostics (ISNACT - 2015):	Department of Metallurgical Engineering and Material Science, IIT Bombay,	Maneka Hoonjan	Research Scholar	February 19-21, 2015
3rd Annual Conference of Indian Federation of Neuro Rehabilitation.	Indian Federation of Neuro Rehabilitation	Shivani Pandey, Nishita Rana, Jigna Dagha, Snigdha Karmorkar, Priyanka Agarwal	Master of Physiotherapy Trimester III & VI	March 07-09, 2015
Industry Visit	Department of Biosciences & Bioengineering, Indian Institute of Technology Bombay	Chetan Patil, Seema Bhatia, Bhairavi Chavan, Shruti Gadagakar, Ashna Jain, Niyati Mudliar, Shreya Pathak, Ketaki Shinde, Abhishek Singh, Divya Desai, Shreya Dhume, Amruta Parmar, Aishwarya Shetty, Vrundali Shinde, Yashika Mirchandani, Nirmla Thakur, Vaibhav Jadhav, Sagar Chhabria, Mugdha Kunte	M.Sc., Integrated M.Sc. Ph.D. &Research Scholars	March 18, 2015
Maharashtra Athletic Association Senior State Athletic Championship, 2015	Mumbai Suburban District Athletic Association	Kavya Mehta, Nikita Suvarna	Master of Physiotherapy IInd year	June 26, 2015
Physiotherapy Camp, Sanjaan	Department of Physiotherapy & Sports Medicine, Nanavati Super Speciality Hospital	Mansi Doshi, Ashwini Kadam, Kaavya Mehta, Shivani Pandey, Pooja Kamble, Forum Kacheria, Nishita Rana, Bhagyashri Sheth, Nikita Suvarna, Jigna Dagha, Snigdha Karmokar	Master of Physiotherapy IInd year	June 27-28, 2015

## Faculty invited as Chief Guest, Keynote Speaker, Chairperson, Participant of a Session

Faculty Name	Name of the Programme	Title of the Talk	Date	Place	Organising Body / Institute	Role Played
Dr. D. Saranath	National Seminar on 'Molecular Basis of Diseases	Study of genome-wide single nucleotide polymorphisms and whole genome expression to indicate biomarkers in oral cancer	August 01-02, 2014	Baroda	Maharaja Sayajirao University	Speaker
Dr. P. Bhatt	Guest Lecture at BNCP	Recombinant DNA technology and its applications	August 09, 2014	Mumbai	BNCP	Speaker
Dr. A. Khanna	Scope and Hope of Stem Cells in Regenerative Medicine	Embryonic Stem Cells	August 28, 2014	Pune	Sir Parshurambhau College, Pune	Speaker
Dr. A. Khanna	Invited Talk	Stem Cells and Stem Cells banking	September 04, 2014	Mumbai	Microbiology Department, Sophia College	Speaker
Dr. A. Khanna	Shri Amrut Mody Birth Centenary Year Celebrations	Stem Cell tracking using magnetic iron oxide nanoparticles	September 19, 2014	Mumbai	Bombay College of Pharmacy	Speaker
Mr. S. Shirvaiker	AWAC awards in pharma sales & marketing excellance	-	September 25, 2014	Mumbai	AIOCD Pharmasoftt ech AWACS Pvt. Ltd	Invited Expert

Faculty Name	Name of the Programme	Title of the Talk	Date	Place	Organising Body / Institute	Role Played
Dr. S. Chandra	International Conference on Innovations and Research Dimensions in Nanobiophar maceutical Technology	Cancer Theranostics Through Multifunction al Magnetic Nanoparticles	October 07-08, 2014	Tiruchirap palli, India	Department of Pharmaceuti cal Technology Anna University, BIT Campus	Plenary speaker
Dr. D. Saranath	Scientific Advisory Committee meeting	-	October 30, 2014	Delhi	National Institute of Pathology, Safdarjung Hospital	SAC Member
Dr. S. Mall	2nd Pan IIM World Management Conference	Cross-selling Model for Insurance Products: An empirical Investigation	November 05-08, 2014	Kozhikode	Indian Institute of Management Kozhikode	Presenter
Dr. D. Saranath	Counselling: Inherited Cancer Patients and Care Givers.	-	December 04, 2014	Mumbai	SIES College	Invited Faculty
Dr. S. Mall	4th India Finance Conference 2014	Earnings Management and Initial Public Offering's Pricing Performance: Evidence from Indian Market	December 19, 2014	Indian Institute of Managem ent Bangalore	IIM, Ahmedabad, IIM Bangalore IIM Calcutta	Speaker
Dr. A. Khanna	Stem Cell Research	-	December 30, 2014	Mumbai	NIRRH - ICSCR	Member

Faculty Name	Name of the Programme	Title of the Talk	Date	Place	Organising Body / Institute	Role Played
Dr. D. Saranath	CrossRoad 2015	Career Opportunities for Science Graduates	January 24, 2015	Mumbai	Wilson College	Invited Speaker
Dr. A. Khanna	Stem Cell Biology Basics	Stem Cell Basics	February 13, 2015	Mumbai	St. Xavier's College - Autonomous	Invited Speaker
Dr. S. Chandra	International Symposium on Nanotechnolo gy and Cancer Theranostics	Development of an electrochemical nanobiosensor and imaging technique for early detection of cervical cancer	February 19-21, 2015	Mumbai	IIT Bombay	Invited Speaker
Dr. A. Khanna	International Symposium on "Nanotechnol ogy & Cancer Theranostics	Magnetic Iron oxide nanoparticles for stem cell labelling and tracking	February 19-21, 2015	Mumbai	IIT Bombay	Invited Speaker
Dr. N. Pandita	National Conference on "Recent Advances in Medicinal Plant Research and its Application in Human Health	-	March 03, 2015	Bhilai	Department of Zoology, Bhilai Mahila Mahavidyalaya, Bhilai	Chief Guest
Dr. A. Khanna	PHARMATECH -2015- Frontiers in Pharmacology	Alternatives to Animal Experiments	March 11, 2015	Mumbai	Department of Pharmacology and Therapeutics, Seth GS Medical College & KEM Hospital, Mumbai	Invited Speaker

Faculty Name	Name of the Programme	Title of the Talk	Date	Place	Organising Body / Institute	Role Played
Dr. N. Pandita	Extraction of Herbals	Plant Research – Extraction to Formulation	March 27, 2015	Mumbai	Bombay College of Pharmacy	Invited Guest Speaker
Dr. D. Saranath	Workshop on Cancer Awareness	Cancer Awareness	April 08, 2015	Mumbai	Cancer Patients Aid Association, Mumbai	Invited Faculty
Dr. D. Saranath	Scientific Advisory Committee Meeting	-	April 25, 2015	Mumbai	HNH Hospital and Medical Research Centre	SAC Member
Dr. S. Chandra	Workshop on Material Science for Energy Storage	Dendrimer- Magnetic Nanoparticles as Electrode Material for Supercapacitors	May 11-15, 2015	Trieste, Italy	The Abdus Salam International Centre for Theoretical Physics	Invited Participant
Dr. M. Bhartiya	Lecture Session on Health	Fitness & Ergonomics	June 26, 2015	Mumbai	J P Morgan, Baroda Pioneer Asset Management	Invited Speaker

# Visits by the faculty

Name of the Faculty Member	Name of the Conference	Date	Place	Organising Body / Institute
Mr. S. Shirvaiker	Knowledge Sharing Meeting for HR Directors of MNC & large / research based Indian Pharmaceutical companies at Organization of Pharmaceutical Producers of India (OPPI)	July 08, 2014	Mumbai	Organization of Pharmaceutical Producers of India (OPPI)
Dr. D. Saranath	Counselling Session for - Thalassemia Carriers	August 04, 2014	Mumbai	Parents' Association Thalessemic Unit Trust
Mr. S. Shirvaiker	Facing Our Future: Countering Non- Communicable Diseases in India Through Investments in Innovation	August 06, 2014	Mumbai	Strategic Partners Group
Mr. S. Shirvaiker	SAS Predictive Modelling (Enterprise Guide + Enterprise Miner)	August 19-23, 2014	Mumbai	SAS India
Mrs. L. Kulkarni	SAS Predictive Modelling (Enterprise Guide + Enterprise Miner)	August 19-23, 2014	Mumbai	SAS India
Dr. S. Mall	SAS Predictive Modelling (Enterprise Guide + Enterprise Miner)	August 19-23, 2014	Mumbai	SAS India
Dr. D. Saranath	Brain Storming Session on Tuberculosis and Leprosy	September 01, 2014	Mumbai	Foundation of Medical Research
Dr. D. Saranath	Brain Storming Session on Medicinal Plants	September 01, 2014	Mumbai	Foundation of Medical Research
Mr. S. Shirvaiker	TAPATHLON 2014	September 09-10, 2014	Mumbai	JP Morgan Chase, Powai
Dr. D. Saranath	Workshop on 'Capacity Building Workshop on Preparing for CSR Partnerships'	September 19-20, 2014	Mumbai	Tata Institute of Social Sciences

Name of the Faculty Member	Name of the Conference	Date	Place	Organising Body / Institute
Dr. P. Bhatt	Bio- Medical Communication Skills Impact On Services, Education And Research	September 27-28, 2014	Mumbai	Medical Research Centre-Kasturba Health Society & Nanavati Superspeciality Hospital
Dr. Brijesh S.	Bio- Medical Communication Skills Impact On Services, Education And Research	September 27-28, 2014	Mumbai	Medical Research Centre-Kasturba Health Society & Nanavati Superspeciality Hospital
Dr. P. Shah	24 <sup>th</sup> Annual Meeting of International Association of Dance Medicine and Science	October 16-19, 2014	Basel, Switzerland	International Association of Dance Medicine and Science
Mr. S. Shirvaiker	ESOMAR session on Enthusiasm and Super Promoter by Rjin Vogelaar	November 27, 2015	Mumbai	Datamatics
Dr. P. Bhatt	Open Day – ACTREC	December 04, 2014	Mumbai	ACTREC
Dr. D. Saranath	Basic Molecular Biology Techniques	December 16, 2014	Mumbai	Foundation of Medical Research
Dr. D. Saranath	Next Generation Sequencing	December 29, 2014	Mumbai	Foundation of Medical Research
Dr. D. Saranath	India's Disease Burden	January 14, 2015	Mumbai	Australian Trade Commission
Dr. P. Shah	SCMM 2015	January 18, 2015	Mumbai	Standard Chartered
Dr. A. Khanna	2 day Review Meeting	January 31 - February 01, 2015	Thanjavur, Tamil Nadu	SASTRA University
Dr. D. Saranath	Next Generation Sequencing	February 10, 2015	Mumbai	Foundation of Medical Research

Name of the Faculty Member	Name of the Conference	Date	Place	Organising Body / Institute
Mr. S. Shirvaiker	International Conference on Contemporary Thinking in Marketing – Big Data Analytics for Marketing	February 21-22, 2015	Mumbai	S. P. Jain Institute of Management & Research
Mrs. L. Kulkarni	Application of Statistics	March 07, 2015	Mumbai	The Department of Statistics, University of Mumbai
Mr. S. Shirvaiker	Application of Statistics	March 07, 2015	Mumbai	The Department of Statistics, University of Mumbai
Mr. S. Shirvaiker	MDP Programme in Predictive Modeling	March 09-11, 2015	Mumbai	SAS Institute, Mumbai
Dr. D. Saranath	6th Annual Convention 2015	March 14, 2015	Mumbai	KJ Somaiya Institute of Management Studies and Research
Mr. S. Shirvaiker	Higher Education Forum (HEF) Annual Convention	March 14, 2015	Mumbai	KJ Somaiya Institute of Management Studies and Research
Dr. P. Bhatt	India Proteomics Day	March 18, 2015	Mumbai	Department of Biosciences & Bioengineering, Indian Institute of Technology Bombay
Dr. Brijesh S.	India Proteomics Day	March 18, 2015	Mumbai	Department of Biosciences & Bioengineering, Indian Institute of Technology Bombay
Mr. S. Shirvaiker	SAS Forum 2015	April 15, 2015	Mumbai	SAS Institute India, Mumbai

## **Guest Lectures**

Name of Guest Speaker	Торіс	Date of Lecture
Dr. Yasmin Khan Associate Professor, Sophia College	Role of Retinoic Acid on the Development of the Posterior Lateral Line in Zebrafish	July 26, 2014
Dr. Ashok Vaidya Research Director, Kasturba Health Society, Mumbai	Reverse Pharmacology for New Domains in Life Sciences	October 17, 2014
Dr. Rama Vaidya Director,Endocrine -Metabolic Disorders Kasturba Health Society, Mumbai	Observational Studies and Paradigm Shift in Reproductive Medicine	October 17, 2014
Dr. Ashwini Kumar Raut Director, Clinical Research & integrative medicine at Kasturba Health Society's Medical Research Centre, Mumbai	Reverse Pharmacology Path to Drug Discovery and Development in Ayurveda	October 17, 2014
Dr. Jayashree Joshi Joint Research Director, Kasturba Health Society's Medical Research Centre, Mumbai	<i>Curcuma longa</i> as an Example of the Reverse Pharmacology in Diabetes and Cancer	October 17, 2014
Mr. Satya Tiwari Commercial Director, Anti-Infectives, Classic Brands, EMAP, GSK	Facets of the Pharmaceutical Industry	October 18, 2014
Dr. Snehalata Deshmukh Former Vice-Chancellor, University of Mumbai	Emerging Trends in Education	November 11, 2014
Ms. Flavia Agnes Advocate and Co-founder of "Majlis"	Woman Empowerment	November 11, 2014
Prof. D. Bahadur Chair Professor, IIT Bombay	Surface Engineered Oxide Nanomaterials for Water Purification	November 21, 2014
Dr. Mangal Nagarsenker Professor, Bombay College of Pharmacy	Drug Delivery by Nanomaterials	November 21, 2014
Dr. K. C. Barick Scientific Officer D, Bhabha Atomic Research Centre	Characterization of Nanomaterials	November 21, 2014
Mr. Deepak Munwar Engineer, Aimil Ltd	Particle Characterization by Zeta Potential	November 22, 2014
Ms. Leena Basrur Executive Chairman, Direxions Marketing Solutions Pvt. Ltd.	Career Scope and Guidance	November 28, 2014

Name of Guest Speaker	Торіс	Date of Lecture
Prof. C. Y. Nimkar Industry Expert (Retired)	Statistics - Challenges and Way Ahead	November 28, 2014
Mr. Amul Desai Senior Principal Consultant, SAS India Ltd.	Evolution of Analytics	November 29, 2014
Mr. Sital Bellani Head of Reinsurance, Willis Processing Services (India) Pvt. Ltd.	Career Opportunities in Catastrophic Modeling	November 29, 2014
Dr. Mukul Joshi Sr. Consultant , EMC Square, Bangalore	Critical Success Factors as You Start Corporate Career	November 29, 2014
Mr. Mandar Joshi Sr. Manager, Improvement, Tata Steel Ltd.	The Art of Problem Solving	November 29, 2014
Dr. Rupali Joshi Research Therapist, Hospital for Special Surgery	Evidence Based Physiotherapy	December 06, 2014
Dr. Anirban Chatterji Post Doctoral Fellow – IIT Bombay	Next Generation Sequencing	December 10, 2014
Ms. Darshana Dadhekar PT, MS, OCS, Cert MDT	Scope of Physical Therapy in Women's Wellness	December 11, 2014
Ms. Geeta Zankar Head of DP & Marketing Science, IPSOS India	Facets of the Market Research Industry and How Statistics and Analytics is Used in this Sector	December 13, 2014
Dr. Sachin Rustagi Head- Medical & Regulatory Affairs, Galderma	Scope of Medical andRegulatory Affairs andClinical Trials in India	December 15, 2014
Dr. Nilesh Gautam Senior Interventional Cardiologist, Asian Heart Institute, Mumbai	Career Opportunities in Health Care for non Medical Professionals	December 19, 2014
Mr. V.K. Rajeev Director- Regional Weather forecasting Centre, Regional Meteorological Department	Facets of Analytical Industry and How Statistics and Analytics is Used in the Meteorological Department	December 20, 2014
Ms. Aditi Mullick Ph.D. Candidate, Mc Gill University	Motor Control, Motor Learning and Spasticity	December 30, 2014
Dr. Santosh Nandan MD, Ambernath Organics Pvt. Limited	New Drug Development Through Molecular Modeling	January 16, 2015

Name of Guest Speaker	Торіс	Date of Lecture
Dr. Evans Coutinho Professor and HOD Pharma Chemistry, Bombay College of Pharmacy	Molecular Modeling	January 16, 2015
Dr. Mariam Degani Professor Pharma Chemistry, ICT	Development of Anti Tubercle Drug with the Help of Hypothetical Modeling	January 17, 2015
Dr. Salil Bendre MD, Consulting Chest Physician, Nanavati Superspeciality Hospital	Respiratory Care	February 22, 2015
Prof. Steve Winder Director, University of Sheffield	A New Therapeutic Strategy to Treat Duchenne Muscular Dystrophy	March 09, 2015
Dr. Sasikumar Menon Assistant Director, Therapeut ic Drug Monitoring Laboratory	Challenges in Bioanalysis	March 14, 2015
Dr. Ganesh Viswanathan Associate Professor, Department of Chemical Engineering, Indian Institute of Technology Bombay	Systems Biology of Tumor Necrosis Factor Alpha Signaling	April 07, 2015
Mr. Sudeepta Chaudhuri Asst. Vice President - Business Intelligence & Advanced Analytics, Idea Cellular	Applications of Statistics and Analytics in the Telecom Sector	April 11, 2015
Mr. Satya Tiwari Commercial Director, Anti-Infectives, Classic Brands, EMAP, GSK	Applications of Statistics and Lean Six Sigma in Pharmaceutical Sector	April 11, 2015
Dr. Pradeep Moonot Orthopedic Surgeon. Breach Candy Hospital, S L Raheja Hospital, Mahim, Sunridges Multi Specialty Hospital	Foot And Ankle – Biomechanics and Clinical Conditions	April 11, 2015

### Workshops Conducted

- Organized four day hands on workshop on Cell Culture and Molecular Biology Techniques from November 03-06, 2014 wherein 13 participants from within and outside Maharashtra participated.
- Sunandan Divatia School of Science celebrated National Education Dayto commemorate the birth anniversary of
  the first Education Minister of Independent India, Maulana Abul Kalam Azad. As part of the celebrations, the school
  organized a one-day event with the theme "India Today" on November 11, 2014. The Chief Guest Dr. Snehalata
  Deshmukh, Former Vice Chancellor, University of Mumbai, delivered a talk on 'Emerging Trends in Education'. The
  Guest of Honour Ms. Flavia Agnes, Co-founder of 'Majlis', A legal resource center, delivered a talk on 'Woman
  Empowerment'. Quiz and debate competitions were organized for the students. Students from all streams of the
  School, viz., Biological Sciences, Chemical Sciences, Statistics and Physiotherapy, participated in the competitions.
- Sunandan Divatia School of Science organized a two-day workshop on Analytical Nanoscience for Chemistson November 21-22, 2014. The workshop provided guest talks and hands-on training in synthesis of different types of nanomaterials and their characterization techniques to 25 participants from various institutes of India.
- This Year 2014-15, Sunandan Divatia School of Science organized a 2 day workshop Sankhyiki on November 29-30, 2014 on '*Empower Future: Career Readiness*'. During this workshop, a series of lectures had been organized, along with Interview training and group discussion training program for students of Statistics. Total 188 participants participated in this workshop. (120 college students, 29 Industry, Academics and Alumni, 39 SOS students)
- Sunandan Divatia School of Science organized a two day event Open Day on December 05- 06, 2014 to provide an
  opportunity for prospective students currently studying in Final year graduation to visit SOS to see their courses
  and activities. The Open Day was attended by 275 students from various colleges like Wilson College, Thakur
  College, Bhawan's College Andheri, Vaze College, Xavier's college, KC College, to name a few.
- School of Science, jointly with Mithibai College and Asian Heart Institute, Mumbai organized an interactive seminar on Opportunities in Health Care for non-medical professionals on December 19, 2014. 180 undergraduate students from the science stream of Mithibai College, Bhavan's College & Nationals College attended the seminar. Dr. Nilesh Gautam, Senior Interventional Cardiologist, Asian Heart Institute Mumbai showed a video and presented about the various courses offered by Asian Heart Institute in collaboration with School of Science.
- Sunandan Divatia School of Science conducted a FDP on January 16-17, 2015 on Molecular Modeling and Drug Design. Molecular modeling has become a valuable and essential tool to medicinal chemists in the drug design process. Molecular modeling describes the generation, manipulation or representation of three-dimensional structures of molecules and associated physico-chemical properties. It involves a range of computerized techniques based on theoretical chemistry methods and experimental data to predict molecular and biological properties. Molecular modeling has become an integrated part of investigating, explaining, and predicting the properties of small organic molecules as potential drug candidates. Modeling techniques are applied in the fields of compound synthesis (conformational analysis and reaction planning), drug discovery (virtual screening), activity rationalization (docking and molecular dynamics simulations), and lead optimization including the prediction of antitarget effects. The key advantage of such a method is that novel structures, not contained in any database, can be suggested.

## Alumni Meet

The 1<sup>st</sup> Alumni meet- Homecoming 2015! was organised by the Placement Cell on 20th June 2015. The meet was organized by Ms. Shailee Ray (Placement Co-ordinator).

The event saw participants, comprising of pass-out students across all departments, namely Biological & Chemical Sciences, Statistics & Physiotherapy.

The alumnus showed a keen interest to form an Alumni association for School of Science.

It was a successful event with networking, relationship-building & interaction among peer-groups, being the focus, along with fun-filled activities.













# Placements

Insurance 5%

> Pharma 5%

> > Neilsen

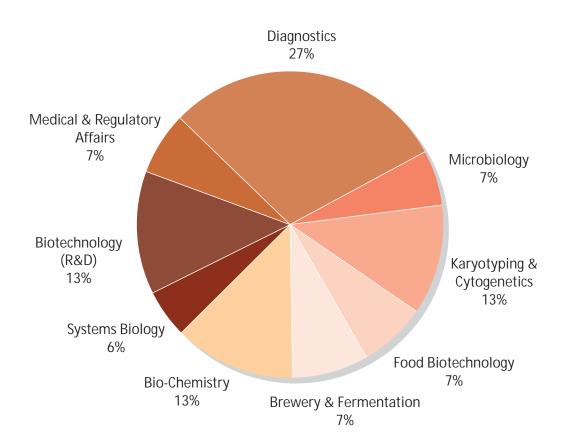
Data Science 3%

Final Placements & Summer Internships - M.Sc. Statistics

HDFC BANK	TATA CENSULTANE VIGEOUCES	G LäT Electrical & Automation	Willis
💽 Cognizant	G L&T Infotech		
nielsen	minacs	, 27 FLUURE <u>2873-3</u> , CENERALI THE NORACE SOLUTIONS	Axionconnect
	GALDERMA Community Structure stillementage	ULTRAMAX INFONET EDUCATION	
Bankir 16%	Re-insurance 5%	Analytical F 32%	irm

Sales Tax Dept. 16% Final Placements & Summer Internships - M.Sc. & Ph.D. Biological Sciences and M.Sc. & Ph.D. Chemical Sciences





### Social Responsibility

It is imperative to create social awareness in the youth of India, the Social Responsibility Cell of SVKM's NMIMS, Sunandan Divatia School of Science is active in social issues such as -Thalassemia awareness and screening, and recently awareness and importance and civic awareness of cleanliness in the Health sector. We propose to inclutate social through events such as Swachh Bharat Abhiyan, thus encouraging students to be socially conscious.

The Swachh Bharat Abhiyan (Clean India Mission) initiated as a national campaign by the Government of India, covering 4041 statutory towns, to clean the streets, roads and infrastructure of the country so as to make India a better place to live in. The School of Science was invited by an NGO - Cancer Patients Aid Association, to participate in Swachh Bharat Abhiyan movement, with dignitaries in several fields, Industry – Anil Ambani, Film Artists – Kamal Hasan, Priyanka Chopra, Salman Khan, Sports – Sachin Tendulkar, Novelist – Shobha Dey. Our Dean Dr.Aparna Khanna, gracefully accepted the invitation, and School of Science initiated the program on November 3<sup>rd</sup> 2014.

Sunandan Divatia School of Science is inculcating social consciousness and committed to creating social awareness as an on-going project, continuing both ß-Thalassemia screening, Blood donations and Swacch Bharat Abhiyan. Our goal is to minimally screen every third year student in of SVKMS NMIMS University for ß-Thalassemia carrier status, promote blood donation in our students and invite and recruit a minimum of 8 additional groups – colleges, institutions and corporates for the Swacch Bharat Abhiyan.

The second cleanliness drive was organized in association with Mukesh Patel School of Technology Management & Engineering (MPSTME) on 19<sup>th</sup>, February, 2015.

Sunandan DivatiaSchool of Science has also organized eight Blood donation and Thalassemia Detectioncamps in various academic institutions during the academic year 2014-15.



# Academia of Sunandan Divatia School of Science

Core Faculty		
Name of faculty	Discipline	Qualification
Dr. Aparna Khanna, Dean	Biological Sciences	B.Sc., M.Sc., Ph.D.
Dr. Dhananjaya Saranath, Professor	Biological Sciences	B.Sc., M.Sc., Ph.D., FMAS.
Dr. Nancy Pandita, Professor	Chemistry	B.Sc., M.Sc., Ph.D.
Mr. Sunil Shirvaiker, Associate Professor	Statistics	B.Sc., M.Sc., DMM
Dr. Sudeshna Chandra, Associate Professor	Chemistry	B.Sc., M.Sc., Ph.D.
Dr. Purvi Bhatt, Assistant Professor	Biological Sciences	B.Sc., M.Sc., Ph.D.
Mrs. Leena Kulkarni, Assistant Professor	Statistics	B.Sc., M.Sc., M.Phil.
Dr. Brijesh Sukumaran, Assistant Professor	Biological Sciences	B.Sc., M.Sc., PGDCR, Ph.D.
Dr. Sunita Mall, Assistant Professor	Statistics	B. Stat., MBA, LLB, M. Phil, Ph.D.
Dr. Mansi Bhartiya, Assistant Professor	Physiotherapy	MPTh
Dr. Prachi Shah, Assistant Professor	Physiotherapy	MPTh
Dr. Poonam Parulekar, Assistant Professor	Physiotherapy	MPTh



Name of faculty	Affiliation	
Dr. Ahmad Ali	Assistant Professor, University Department of Life Sciences, University of Mumbai	
Mr. Akshay Dixit	Education Consultant, Education - India SAS Institute (India) Pvt. Ltd	
Mr. Amit Gupta	Co-Founder: Active Finance Catalyst & Advisor	
Dr. Anjana Saha	Independent Researcher	
Dr. Aparna Deshmukh	Associate Professor & Head, Department of Biotech, Thakur College	
Dr. Asha Chitnis	Consulting Pediatric Physiotherapist	
Dr. Devangee Mehta	Clinical Physiotherapist, Department of Physiotherapy & Sports Medicine, Nanavati Super Speciality Hospital	
Dr. Evans Coutinho	Professor and Head, Pharmaceutical Chemistry Department, Bombay College of Pharmacy	
Ms. Hemal Thakker	Co-Founder, Finstat Academy	
	Principal Consultant - Analytics, Sankhya Analytical Research Pvt. Ltd.,	
	Consultant - Senior Catastrophe Modeler, Sutherland Global Services	
Dr. Kalpana Phal	Associate Professor, Department of Statistics, B. N. Bandodkar College	
Dr. Krishnapriya Mohanraj	Professor and Head, Department of Pharmaceutical Analysis, Bombay College of Pharmacy	
Dr. Krutika Desai	Associate Professor, Department of Microbiology, Mithibai College	
Dr. Lokesh Bhatt	Assistant Professor, Bhanuben Nanavati College of Pharmacy	
Dr. Manju Bhatia	Clinical Occupational Therapist, Department of Physiotherapy & Sports Medicine, Nanavati Super Speciality Hospital	
Dr. Manjusha Deshpande	Visiting Faculty, Mumbai University	
Mr. Mukesh Doshi	Director, POCL	
Ms. Namrata Sahu	Consultant, Market Research	
Ms. NazimaMunshi	Assistant Professor, Institute of Intellectual Property Studies (IIPS), NMIMS	
Mr. Nikhil Gadewal	Scientist, Bioinformatics, ACTREC	
Prof. Prasad Patki	Vice Principal, Bhavan's College	
Dr. Priti Jadiya	Clinical Physiotherapist, Kokilaben Dhirubhai Ambani Hospital	
Dr. Sangeeta Vasudeva	Hon. Asst. Clinical Physiotherapist, Department of Physiotherapy & Sports Medicine, Nanavati Super Speciality Hospital	
Mr. Sanket Amdekar	Senior Executive, Reliance General Insurance	
Dr. Shaila Deshmukh	Ex- Head, Department of Statistics, K. C. College	
Dr. Shatarupa Sinha	Scientist, Mumbai	
Dr. Snehal Deshpande	Director, Sneh Rehabilitation	
Mr. Veerendra Anchan	Assistant Professor, S. M. Shetty College of Management	
Dr. Y K Lahir	Adjunct Professor, Department of Biophysics, University of Mumbai	

#### Administration

Dr. Rajan Saxena	Vice Chancellor	
Dr. M. N. Welling	Pro Vice Chancellor	
Dr. Meena Chintamaneni	Registrar	
Mr. Ashish Apte	Controller of Examinations	
Ms. Alka Shukla	Deputy Controller of Examinations	
Ms. Anjali Barmukh	Deputy Registrar - Admissions	
Ms. Varuna Saksena	Deputy Registrar - Academics	
Ms. Khyati Bhatt	Deputy Registrar - HR & Personnel	
Ms. Meeta Shah	Psychologist & Counsellor	
Finance		
Ms. Karuna Bhaya	Finance Officer	
Ms. Varsha Oak	Additional Finanace Officer	
Ms. Ermegilda Goes	Chief Accountant	
Marketing & Public Relations		
Mr. Anjul Goel	Director (Marketing)	
Ms. Sharalene Moonjely	Jt. Director (Marketing)	
Mr. Ashish Tambe	Public Relations Officer	
Computer & Information Technology		
Mr. Nikhil Vyas	WebAdministrator	
Corporate Relations & Placements		
Ms. Shobha Pai	Director (Placements)	
Ms. Vedangi Mayekar	Senior Placement Executive	
Library		
Shivanand Sadlapur	Librarian	
Varsha More	ReferenceLibrarian	
Sunandan Divatia School of Science		
Dr Aparna Khanna	Dean	
Academic Administration		
Neena Jamsandekar	Course Co-ordinator	
Shailee Ray	Placement Co-ordinator	
Ashita Dara	Co-ordinator (Statistics)	
Manasi Naik	Assistant	
Madhuri Khanolkar	Lab Assistant	

#### Student Speak



I would firstly like to thank SVKM's NMIMS University, School Of Science for giving me the opportunity to study M.Sc. Statistics in their institute. I would like to express my gratitude for helping me to pursue my passion and to accomplish my long term goals. The experience in this school was a completely different one especially because of the pedagogy adopted here at the School Of Science. The curriculum of the Masters Program in Statistics is designed in an unique way keeping in mind the ever changing industry requirements. Unlike the other universities or colleges teaching this program, we are not hammered with only long derivations and theorems but rather emphasis is given more on the application of a particular topic. In order to improve our understanding and to get a broader picture relevant business case studies and data analysis is being done. The curriculum consists of a unique blend of theoretical as well as practical knowledge. The 2 months summer internship and 6 months of live projects helps us understand the bottlenecks faced by the industry and how we can leverage our knowledge to solve them and create business values. Also in the world of technology equal emphasis is given to machine learning where in we are trained in various statistical tools which make our data analysis easier. This unique blend of theoretical knowledge as well as industry experience makes this journey exciting & filled with knowledge. From time to time guest lecture by industry experts are conducted so that we can fair idea about the industry and train ourselves accordingly. On a daily basis we get to learn many things because so many things keep happening apart from the regular lectures. Life here is full of competition, knowledge, exciting and fun filled which has helped me to evolve as a better person and sharpen my technical skills.

> - Mr. Prasun Gosh (M.Sc. Statistics)



To put it in one word, I would say "LEARNING". Two years in School of Science have been great experience of learning, by learning, I not only mean the statistical theory and application knowledge or improvement in analytical skills but also soft-skills, grooming etiquette, decision making, being confident and everything required at any point of life. The entire staff (teaching and non teaching) of School of Science have been extremely supportive, they are strict wherever necessary and extremely helpful otherwise. The environment in SOS is richly positive, there are great placement opportunities made available for us, faculty makes sure that we understand every concept, they also manage a lot of Guest lectures thereby helping students to get a clear picture about the current scenario, opportunities, challenges and upcoming trend in their respective fields, also a lot of cultural activities make sure that we enjoy being in SOS. Two years of my life in SOS, every single day was utilized for my own good.

- Mr. Gaurav Chettiyar (M.Sc. Statistics)



Enrolling in the Master of Biological Sciences programme at School of Science, NMIMS is one of the smartest decisions I've ever taken. It was at this place, that we were finally treated like scientists and expected to become one none the less. The freedom to challenge and question ourselves is what has been the driving force behind my growth at this school. What I liked best other than the A level education, was SOS's crisp adhesion to a given schedule and punctuality. While some of my colleagues were stressed and lagging academically, I had time to prepare myself for various competitive exams and get a stronghold on my future. The practical sessions were the best part of my two years at SOS, where the faculty and PhD scholar's taught us how to approach a subject like a scientist and achieve our maximum potential, rather than like a mere student with the goal of passing on. In conclusion, I'm not leaving SOS with just a degree, but with a new outlook towards science, and knowing that I have the potential to do much more, thanks to SOS.

- Ms. Sujata Singh (M.Sc. Biological Sciences)



Luck is a matter of preparation meeting opportunity – is one thing I definitely learnt during my years at School of Science! And at my school, these preparations were a joint venture between me and my loving teachers! I was quiet literally taught here that things turn out best when you make the best of the way things turn out. Truly a lesson for life! Honestly, my school was never a conventional establishment where I sat for the lectures, studied the subjects, finished the work and The End.! At SOS, it never starts at an apple and ends at zebra, but always a search beyond! I take immense pride in calling myself SOS graduate and I absolutely cherish every experience I've earned at the school, the love and the care shared by my teachers and making a bunch of coolest n' craziest friends for life!

- Dr. Harita Parikh (Research Scholar)



When I commenced my journey with School of Science, MPT Program, I did so to challenge my thinking & change my outlook. This could not have been achieved without the remarkable learning opportunities and practical exposure provided to me by them. The entire course is intense & purpose driven, yet it is fun & full of surprises. The clinical exposure is excellent, wherein you get acquainted with all the possible cases and are taught how to use the most recent methods of assessment & treatment. The faculty members are competent, extremely knowledgeable and immensely supportive & approachable. Their commitment & dedication towards the course is truly inspiring & engaging. The course has played a transformational role in my life since I set foot in the campus and still continues to do so even today. It has truly been a stimulating experience, and a very worthwhile investment in terms of both personal and professional development.

- Ms. Sabah Thaver (Master of Physiotherapy)

# **NMIMS** Anthem

We do what's right and not what's easy We give our best shot each and every time We set the standard We are the future We are a part of this institute so fine

NMIMS NMIMS

Respect the past Create the future Transcend horizons however far We have what it takes We make a great team At NMIMS each one is a star

> NMIMS NMIMS NMIMS NMIMS



# SVKM'S Narsee Monjee Institute of Management Studies

(Declared as Deemed to be University under Section 3 of the UGC Act, 1956)

3rd Floor, Bhaidas Sabhagriha Building, Vile Parle (West), Mumbai - 400 056. Tel: (91-22) 42355958/59 | Fax: (91-22) 26114512 Email: admssions.sos@nmims.edu | Web: www.nmims.edu