

HiMediaLaboratories[™] Newsletter Volume - 7 | June 2018



Message from CEO Un-applauded eminence **Experience** extraction Mumbai 6 **Marathon 2018** Mesenchymal Stem Cell **International Events** Superbugs 11 making **The Autism** Intervention... NABL accredation **Exhibition and** Conferences

Message from CEO

Warm Welcome patrons to our latest "Lab to Tab™" newsletter published in this monsoon, June 2018. HiMedia have been a fountain of innovation, creativity and technological advances and I am proud to say, my team plans to continue this heritage of leadership

in the markets we serve and in the various communities where we live and work. We have many promising novel products in our R & D pipeline and new features in our "Lab to Tab™" issue and some message to take with.

Mesenchymal stem cells (MSCs) -The wonder cells!

Stem cells are cells in the body that cannot only self-replicate but can also differentiate into various tissue and organ types. Mesenchymal stem cells are 'multipotent stem cells', meaning they can produce more than one type of specialized cells of the body, but not all types. MSCs can differentiate into osteoblasts, chondrocytes, tenocytes, skeletal myocytes, and cells of the visceral mesoderm. In recent years, private and public stem cell banking from the umbilical cord has gained popularity in India. The youngest and most primitive MSCs can be obtained from umbilical cord tissue, namely Wharton's jelly and used for the treatment of various diseases.

The stem cell platform from HiMedia is a one point solution (OPS) for mesenchymal stem cell applications in India, thus contributing to the growth of global mesenchymal stem cell industry.

Nucleic Acid Extraction

Anything we eat, use or the clothes we wear are directly or indirectly derived from plant sources. That's the reason research on plant's gene sequence and its function, is very crucial and for that nucleic acid extraction is very vital and mandatory step. However, due to the presence of high levels of polysaccharides, pigments, chemical heterogeneity secondary metabolites, oxidizable quinones and other substances in various plants species, it is always difficult to isolate high quality DNA from plants. HiMedia with extensive research and optimization have developed innovative column based extraction kits to give very high yield and pure DNA. For example HiMedia's HiPura™ SuperPlant DNA Purification Kit, is the best option and well-suited to isolate DNA from all the plants having high phenolic compounds and also help us to avoid usage of harmful chemicals to obtain high yield.

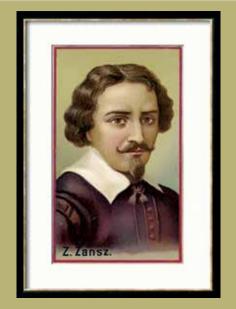
Anti-Microbial resistance

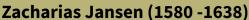
The resistance among various microbial species (infectious agents) to different antimicrobial drugs has emerged as a cause of public health threat all over the world at horrifying rate. Almost all the capable infecting agents (e.g., bacteria, fungi, virus, and parasite) have generated high levels of multidrug resistance (MDR) with enhanced morbidity and mortality; thus, they are referred to as "superbugs" that are resistant to several types of antibiotics. New resistance mechanisms are emerging and spreading globally, threatening our ability to treat common infectious diseases, resulting in prolonged illness, disability, and even death. HiMedia Laboratories have a wide range of resistance detection systems such antibiotic discs of particular antibiotic per disc, gradiently loaded antibiotic Ezy MIC™ strips and selective and differential media etc.

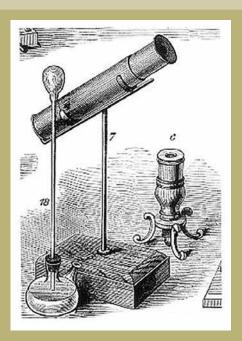
My R & D team at HiMedia keenly supports scientists to understand different arenas of Biosciences like Microbiology, Animal cell culture, Plant tissue culture and Molecular Biology which are essential aspects of our lives, its evolution, and its future. We give them the power to imagine and to execute those ideas into inventions and theories of life.

Un-applauded Eminence of Scientific Research

Zacharias Jansen and the first compound microscope (1580 -1638)







Today, when we say "microscope," we really actually mean "compound microscope". During the 1590's, two Dutch spectacle makers from Middelburg, Zacharias Jansen and his father **Hans** experimented with these lenses. They put several lenses in a tube and made a very important discovery. Although no microscopes survived, Dutch royalty appreciated it a lot. Zacharias wrote to a Dutch diplomat, William Boreel, in the 1650's and Boreel recounted the design of the microscope. Many investigations on the subject have been documented in his credit, before the Second World War. Many of the Middelburg archives were destroyed by a bombing of Middelburg in 1940.

It was **Anton van Leeuwenhoek** (1632-1723), a Dutch draper and scientist, who became the first



Jansen's first microscope

man to make and use microscope in real sense. Leeuwenhoek achieved greater success than his contemporaries by developing various types of lenses and was the first to see and describe bacteria, yeast, plants, the teeming life in a drop of water, and the circulation of blood corpuscles in capillaries.

Leewenhoek's work was verified and further developed by English scientist **Robert Hooke** (1635 – 1703), who published the first work of microscopic studies, Micrographia, in 1665, which was his most famous work and is noticed for the stunning illustrations, drawn by Hooke himself.

Many other eminent scientists conducted research on optical glass, greatly contributed to the improvement of the optical quality and development of the microscope. As a result, we have all types of microscopes right from simple microscope to highly advanced type like electron microscopes enabling scientists to carry out diverse types of research work.

To know more please click,

- http://www.history-of-the-microscope.org/ history-of-the-microscope-who-inventedthe-microscope.php
- https://www.revolvy.com/main/index. php?s=Zacharias+Jansen&item_type=topic



Want to overcome the obstacles of nucleic acid extraction? Experience easy extraction with HiMedia

What is plant research?

Plant is one of the major sources which fulfill our basic needs. Anything we eat or the clothes we wear is derived either directly or indirectly from plant sources. This becomes the obvious and one of the most important reasons to dwell more into plant research areas with respect to their gene sequence and gene function, for which nucleic acid extraction is very crucial and mandatory step.

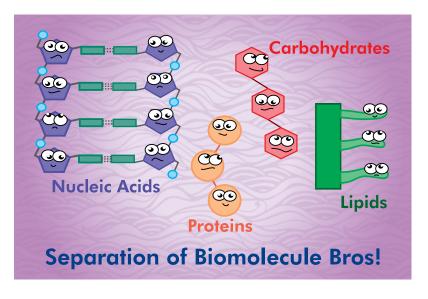
cancerogenic, etc. Hence vast research on genetic component of these medicinal plants is being carried out.

What is nucleic acid extraction?

In nucleic acid extraction, DNA/RNA is isolated from proteins and other cell components. It is routine practice in clinical field, food industry, forensic science as well as plant and soil testing.

Why Plant research is required?

- Human health: One of the pressing needs of the current scenario, is to improve human health which can only be achieved by improving the nutritional content of crops, which is possible by genetically engineered plants.
- Crop improvement: Plant genomics has opened new ways and options for plant breeder to introduce beneficial genes to produce transgenic plants which are resistant to pest and other abiotic stresses.
- Functional genomics: Whole genome sequencing is a boon to providing evidence about evolutionary journey of a functional gene as well as in recognizing an indigenous species.
- Medicinal plants and research: Natural products of medicinal plants are significant source for phytodrugs because of their therapeutic properties such as, antifungal, antibacterial, antimalaric, contraceptive, antipyretic, anti-inflammatory, analgesic, anti-hypertensive, antioxidant, anti-



The procedure usually follows three main basic steps:

- 1. Dissociation of tissue
- 2. Cell lysis to release DNA and,
- 3. Purification of DNA

Experimenting with an IMPURE sample can give you erroneous results. In order to avoid such happenings, it is important to ensure purity of nucleic acid, which then can be used for PCR, Sequencing etc.

Purity of nucleic acids can be checked by quantifying the samples with spectrophotometer. Getting a value of approximately 1.6-1.8 at A260/A280 ensures purity of DNA. However, pure RNA has an A260/A280 ratio of approximately 1.8-2.0.

Problems associated with Plant DNA Extraction

Earlier, nucleic acid extraction used to be labor intensive and time consuming process. Apart from that, it is crucial to obtain a good yield of the purified extract. Moreover, some species of plants (like banana, pomegranate, sugarcane etc.) contain phenolic compounds and plants like cotton contains high levels of polysaccharides, oxidizable quinones which makes DNA extraction a troublesome process. Presence of these organic compounds tremendously inhibit the process of DNA extraction.

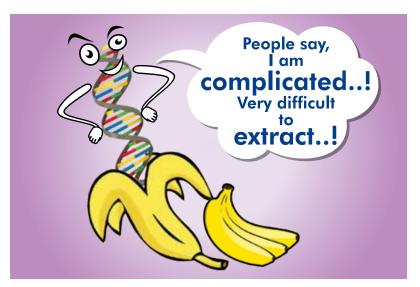
Here we need to just pick up the right method

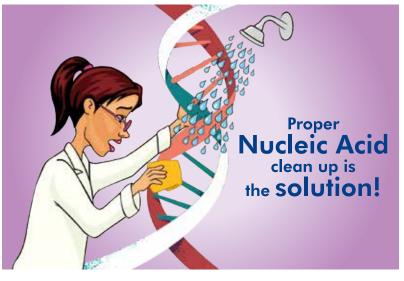
A correct choice is not just a solution, it is the elimination of the problem

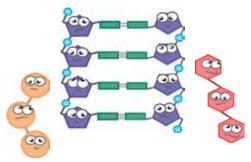
Because of vast diversity in plant species, it is very difficult to follow single protocol for all.

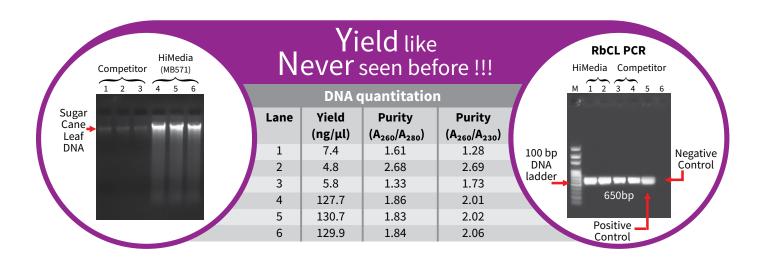
HiMedia with extensive research and optimization has developed innovative column based extraction kits to give very high yield of up to 500ng/µL and purity ratio of 1.8 to 2.0. For example HiMedia's HiPura™ SuperPlant DNA Purification Kit, a column based protocol is the best alternative to manual methods and well-suited to isolate DNA from all the plants which contain phenolic compounds and diminish the risk of using harmful chemicals to obtain high yield.

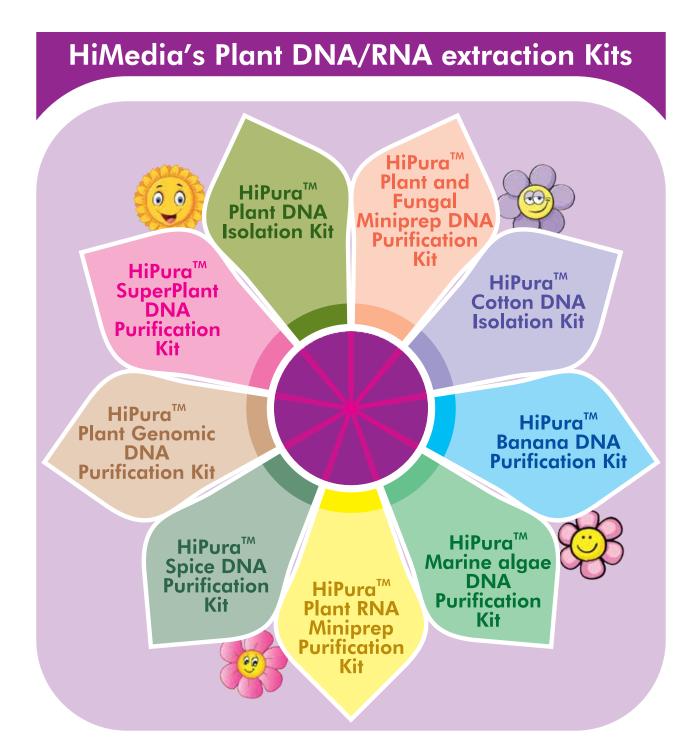












HiMedia Participated in the 41st Marathon



"The Miracle isn't that I finished. The miracle is that I had the courage to start." - John Bingham













The Tata Mumbai Marathon (previously known as Standard Chartered Mumbai Marathon) is amongst the top ten marathons in the world and was held on Sunday, January 21, 2018. HiMedia regularly participates in this Marathon with full enthusiasm. This year also total 77 employees participated. Amongst which 12 completed a half marathon and rest of them participated for Dream Run.









Medical technologies and treatments have evolved over time in response to the changing nature of diseases. There was a time when diseases such as plague and cholera were considered deadly. However, because of powerful antibiotics discovered and commercialized in the last 7 decades, they are no longer a threat to our generation. Likewise, smallpox and polio have been expertly controlled after the invention of vaccines. The modern age diseases such as cancer, HIV, diabetes and cardiac diseases necessitate alternative medical breakthrough technology. This is where regenerative medical science gives us some promising hope. Stem cell technology is swiftly evolving and is emerging as the most exciting and reliable field of life science.

Stem cells are the cells in the body that can not only self-replicate but can also differentiate into various tissue and organ types. These cells can be obtained from various sources, such as bone marrow, embryo, fetus, adipose tissue, and umbilical cord blood and tissue.

What are mesenchymal stem cells (MSCs)?

Mesenchymal stem cells are 'multipotent stem cells', meaning they can produce more than one type of specialized cells of the body, but not all types. MSCs can differentiate

into osteoblasts, chondrocytes, tenocytes, skeletal myocytes, and cells of the visceral mesoderm.

Distinct Biological properties of MSCs:

Mesenchymal stem cells show some starkly distinct properties from other stem cells, which makes them very attractive for researchers all over the world!

- ◆ Some studies have revealed that the differentiation potential of MSCs extends beyond the conventional mesodermal lineage, as they can also differentiate into cells of the ectodermal and endodermal origin, such as hepatocytes (liver cells), neurons, and cardiomyocytes (heart cells).
- MSCs can suppress immune cells independently of the major histocompatibility complex (MHC) identity between donor and recipient due to their low expression of MHC-II and other costimulatory molecules. That means the chances of graft versus host disease (GVHD) are very low with MSCs. These are natural immune-suppressants. This facilitates allogenic transplantation.
- A number of studies have suggested that, MSCs have the capacity to migrate to sites of inflammation and tumor microenvironments.



The promising features of MSCs in regenerative medicine:



- Due to their distinct biological properties, MSCs can be used for transplants to suppress graft rejection immune response from the host.
- MSC therapy is an attractive candidate for cardiovascular repair due to its regenerative and immunomodulatory properties. Clinical trials using MSCs to improve cardiac function have also yielded encouraging results. http://circ.ahajournals.org/content/114/4/339
- MSCs have also been proposed as a treatment for autoimmune diseases. Patients suffering from severe autoimmune diseases do not respond to standard therapy and often require autologous or allogeneic Hematopoietic Stem Cell Treatment. The use of MSCs is however a more feasible and safe option, as it modulate immune responses.
- MSCs have also been used to treat cirrhosis in a limited number of trials. https://www.ncbi.nlm.nih.gov/pmc/articles/ PMC4579873/
- MSCs are emerging as vehicles for cancer gene therapyduetotheirinherentmigratoryabilities toward tumors. Whether MSCs themselves have antitumor effects is still controversial. https://www.nature.com/articles/gt200839

In recent years, umbilical cord derived stem cell banking has gained popularity in India. The youngest and most primitive MSCs can be obtained from umbilical cord tissue, viz. Wharton's jelly. Globally, there are ~800 active MSCs clinical trials

today (clinicaltrials.gov), and this number is increasing significantly year-over-year. Currently,

countries such as USA and Germany have a very rapidly expanding stem cell markets.

HiMedia and MSCs

HiMedia ventured into the mesenchymal stem cell market in 2011. The mesenchymal cell culture platform from HiMedia offers a range of products such as mesenchymal stem cells (HiFi™), expansion media (HiMesoXL™), expansion kits (EZXpand™) and differentiation media to facilitate rapid expansion and healthy differentiation of stem cells. All of these are provided in the Indian market at very affordable prices with a quality that is at par with international standards.

The HiFi mesenchymal cell lines are derived from Wharton's Jelly (HWJ-MSC), human Adipose tissue (HAD-MSC), and human dental pulp (HDP-MSC). Based on these types, there are differentiation media for Adipocytes (HiAdipoXL™), Osteocytes (HiOsteoXL™) and Chondrocytes (HiChondroXL™). In addition to this, HiMedia also offers staining kits for all three differentiated cell types of mesenchymal stem cells (EZstain™).

The stem cell platform from HiMedia is a one point solution (OPS) for mesenchymal stem cell applications in India, thus contributing to the growth of global mesenchymal stem cell industry.



International Events

The American Society for Microbiology (ASM)

2018, Atlanta, USA











CPhI South East Asia 2017, Jakarta, Indonesia



ZITF 2018, Bulawayo, Zimbabwe



Zimbabwe International Trade Fair

CPhI India 2017, Mumbai







National Events

Warkem - Our Associate Company











Kisan Expo 2017, Pune







Solapur 2018

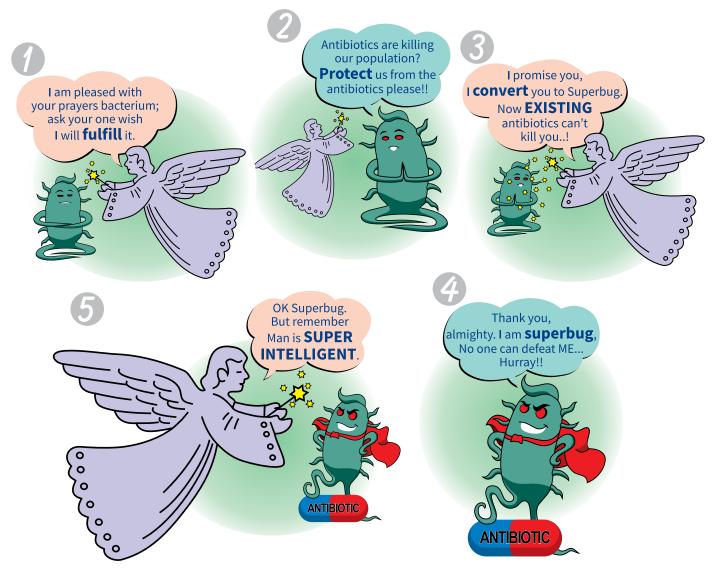




"Mr. Viresh Prabhu- S. P. of Solapur district has handed over this year's "Ideal Farmer Award" to the dynamic farmer Mr. Mallikarjun Hanjage, from village-Valsang in Taluka-South Solapur. Other dignitaries on the stage were Dr.Gajendra Bharud -C.E.O. Solapur Dist. and Mr. Mallikarjun Kalshetty -Collector Nandurbar Dist. Mr.Gajendra Nadgoud, our representative from Warkem Biotech Pvt. Ltd. guided the farmer, due to which the farmer could take an astonishing Sugarcane yield of 81 tons/acre in spite of water shortage for 2 months."







The resistance observed in different bacterial and fungal species to range of antimicrobial drugs has been a cause of public health threat. Due to the new resistance mechanisms adapted by microbes and decrease in efficiency of treating common infectious diseases, it results in failure of microbial response to standard treatment, leading to prolonged illness, higher expenditures for health care, and an immense risk of death. Many microbes have employed high levels of multidrug resistance (MDR) with enhanced morbidity and mortality; thus, they are referred to as "superbugs."

Superbugs are strains of bacteria that are resistant to several types of antibiotics. For nearly a century, bacteria-fighting drugs known as antibiotics have helped to control and destroy many of the harmful bacteria. But in recent decades, antibiotics have been losing their punch against some types of bacteria. In fact, certain bacteria are now unbeatable with today's medicines. Sadly, the way we've been using antibiotics is helping to create new drug-resistant "superbugs." https:// www.youtube.com/watch?v=wFCquboyI28; https://www.youtube.com/watch?v=fyRyZ1zKtyA

Antimicrobial resistance occurs naturally over time, usually through genetic changes. Moreover, the misuse and overuse of antimicrobials is accelerating this process. Antimicrobial resistance is one of the major public health problems especially in developing countries where relatively easy availability and higher consumption of medicines have led to disproportionately higher incidence of inappropriate use of antibiotics and greater levels of resistance compared to developed countries. https://www.youtube.com/watch?v=kFejLiVUlKk

Production of the hydrolytic enzyme β -lactamases is one of the strategies adopted by bacteria to develop resistance to β -Lactam class of antibiotics. Some major mechanisms adapted are as follows.

Extended Spectrum β -lactamases (ESBL) producers are the bacteria resistant against third generation cephalosporin class of antibiotics.

AmpC β -lactamases are also resistant to Third generation cephalosporins. They differ from ESBL's in that they are cephalosporinases and are resistant to beta lactamase inhibitors. They are inactivated by Cloxacillin and ESBL's are inactivated by Clavulanic acid.

The introduction of carbapenems into clinical practice represented a great advance for the treatment of serious bacterial infections caused by β -lactam resistant bacteria. Due to their broad spectrum of activity and stability to hydrolysis by most β -lactamases, the carbapenems have been the drug of choice for treatment of infections caused by penicillin-or cephalosporin-resistant Gram-negative bacilli especially ESBL type. MBL have potent hydrolysing activity not only against carbapenem but also against other β -lactam antibiotics resulting in a serious threat.

Carbapenem antibiotics have an important antibiotic niche in that they retain activity against the cephalosporinases and extended-spectrum β -lactamases found in many gram-negative pathogens. Carbapenemases are carbapenem hydrolyzing β -lactamases that confer resistance to carbapenem class of antibiotics.

Carbapenemases belong to two major molecular families:

MBL KPC

(Metallo β - Lactamase)

(Klebsiella pneumoniae Carbapenemase)

Metallo β- lactamase (MBL) belongs to a class B, β -lactamase which requires divalent cations of zinc (a metal) as co-factors for enzyme activity.

Klebsiella pneumoniae Carbapenemases (KPCs) are an important mechanism of resistance for an increasingly wide range of Gram-negative bacteria and are no longer limited to *K. pneumoniae*. The resistance gene was associated with a large plasmid. Infections caused by bacteria-producing KPCs

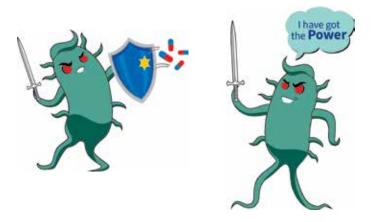
are becoming an increasingly significant problem worldwide as they are resistant to carbapenems class of antibiotics.

Other superbugs like **Methicillin Resistant Staphylococcus aureus** (MRSA) are resistant to nearly all antibiotics, including oxacillin, methicillin, amoxicillin, and even penicillin. Although methicillin is no longer produced, the name MRSA has persisted and can be regarded as referring to resistance to virtually all β -lactam antibiotics. Susceptibility testing now typically uses oxacillin and/or cefoxitin. Methicillin resistance is mediated by PBP-2a, a penicillin-binding protein encoded by the mecA gene that permits the organism to grow and divide in the presence of methicillin and other β -lactam antibiotics.

Vancomycin Resistant Enterococci (VRE) is a bacterial strain of *Enterococcus* that has acquired resistance to the vancomycin through the uptake of resistant plasmid. Vancomycin is the most common drug used to treat against *Enterococcus* infection. VRE can be resistant to not just Vancomycin; it can be resistant to other antibiotics commonly used for *Enterococcus* infections such as aminoglycosides, and ampicillin. VRE is a major concern to hospitals. Healthcare workers can carry the bacteria and pass it along to patients. VRE is most associated with nosocomial infections, making up about 30% of all *Enterococcus* infections in hospitals.

Under such pressure of superbugs there is need for better and better antibiotics. To decide the exact remedial antibiotic and exact resistance type we need very sensitive, accurate and efficient tools for diagnosis of both. HiMedia's antibiotic resistance wing is one-stop solution for this.

HiMedia products in diagnosis of antibiotic resistance: HiMedia Laboratories have a wide range of resistance detection system such as antibiotic disc, gradient based Ezy MIC[™] Strips and selective & differential media etc.



Type of Resistance Mechanism	Product Category	Product Code	Product Name
ESBL	Ezy MIC™ Strips	EM132	Improved ESBL Detection Ezy MIC™ Strip
		EM098	Ceftazidime/ Ceftazidime + Clavulanic acid Ezy MIC™ Strip
		EM099	Cefotaxime / Cefotaxime + Clavulanic acid Ezy MIC™ Strip
		EM116	Cefepime + Clavulanic acid Ezy MIC™ Strip
		EM117	Ceftriaxone + Clavulanic acid Ezy MIC™ Strip
	Sensitivity Discs	SD238	Kit I for ESBL Identification, Cefotaxime (Cephotaxime)
		SD239	Kit II for ESBL Identification, Cefepime
		SD240	Kit III for ESBL Identification, Ceftazidime
		SD241	Kit IV for ESBL Identification, Cefpirome
	Hexa Disc	HX095	Hexa G-minus 23
		HX096	Hexa G-minus 24
	Dehydrated Culture Media	M1829	HiCrome™ ESBL Agar Base
AmpC	Ezy MIC™ Strips	EM133	Improved AmpC Detection Ezy MIC™ Strip
		EM127	Cefotetan/ Cefotetan+Cloxacillin Ezy MIC™ Strip
	Sensitivity Discs	SD041 and SD285	Cefoxitin and Cefoxitin-Cloxacillin
MBL	Ezy MIC™ Strips	EM078	Imipenem with and without EDTA Ezy MIC™ Strip
		EM092	Meropenem with and without EDTA Ezy MIC™ Strip
	Sensitivity Discs	SD073 and SD282	Imipenem and Imipenem EDTA
KPC	Ezy MIC™ Strips	EM141	Ertapenem/ Ertapenem + Boronic acid Ezy MIC™ Strip
	Dehydrated Culture Media	M1831	HiCrome™ KPC Agar Base
MRSA	Ezy MIC™ Strips	EM077	Vancomycin-Cefoxitin Ezy MIC™ Strip
		EM063	Oxacillin-Vancomycin Ezy MIC™ Strip
	Sensitivity Discs	SD088	Oxacillin (1 mcg)
		SD041	Cefoxitin (30 mcg)
		SD019	Methicillin (5 mcg)
	Dehydrated Culture Media	M1674	HiCrome™ MeReSa Agar Base
		M1974	HiCrome™ Rapid MRSA Agar Base
		M1953	HiCrome™ MRSA Agar Base, Modified
VRE	Ezy MIC™ Strips	EM060	Vancomycin Ezy MIC™ Strip
	Sensitivity Discs	SD045	Vancomycin (30 mcg)
	Dehydrated Culture Media	M1830	HiCrome™ VRE Agar Base
		M1925	HiCrome™ VRE Agar Base, Modified



At the Lokmanya Tilak Municipal Medical College and General Hospital, Sion, Mumbai celebrated its 1st Anniversary

-The HiMedia's initiative for children with autism-

The Event:

The Lokmanya Tilak Municipal Medical College and General Hospital's **Autism** Intervention Centre (AIC) celebrated its 1st 29thAnniversary on January 2018. The AIC is funded by HiMedia Laboratories Pvt. Ltd. which is amongst the top three brands of



was presided by Dr. Jayshree Mondkar, Dean Incharge, Lokmanya Tilak Municipal Medical College and General Hospital, Sion, Mumbai, Ms. Saroj G. Warke, Cofounder and Director, HiMedia Laboratories Pvt. Ltd. and Dr. Vishal Warke, Director, HiMedia Laboratories Pvt Ltd and

Adhikari. The occasion

microbiology in the world. The Programme was attended by Dr. Radha Ghildiyal Professor and Head Department of Pediatrics, Dr. Mona Gajre, Professor and Incharge of AIC, Dr. Nilesh Shah, Professor and Head of Psychiatry, Dr. Rashmi Yeradkar, Occupational Therapy Head, Dr. Avinash D'esouza, Clinical Advisor of AIC, Dr. Sushant Sarang, Assistant Professor of Psychiatry, Dr. Jadhav and Dr.

other dignitaries.

Present at the occasion, parents' of children with autism spectrum disorders (ASD) excitedly shared their experience of how their children are being taken care of at the Autism Intervention Centre. They expressed their gratitude towards AIC for the continuous support in raising their children. It was overwhelming to see the children celebrating the anniversary by giving performances and showcasing their talent through dancing and singing.



How the project AIC Began:

The project of AIC that is being supported through CSR funds of HiMedia Laboratories Pvt. Ltd. in the form of generous funds taking care of the expenses regarding the infrastructure, instruments required for therapy, electrical devices and salary of employees. It was set up on the premise that there is a requirement for a Centre which can cater to the needs of the children with autism. An increasing trend of referrals to the Pediatric Neurodevelopmental Centre for certification of children with autism was found. On looking around, the availability of existing infrastructure for autism

in the public sector was almost negligible. Dr. Mona Gaire, Professor Pediatrics at LTMMC and LTMGH with Dr. Vishal Warke and others from the Warke family gave wings to the concept of an Intervention Centre in a public setting hospital. A multispecialty team formed by Departments of Pediatrics, Occupational Therapy and Psychiatry of Lokmanya Tilak Municipal Medical College and General Hospital and headed by Dr. Mona Gajre, Professor Pediatrics has been catering to these children. The AIC is located at the Urban Health Centre, Dharavi popularly known as "Chhota Sion" at a distance of less than 1 km from the main Sion Hospital premises and provides services of diagnostics, interventions including certifications for children with autism. It caters to children with autism in the age group of 2-18 years and as of today, there are 76 ASD children who have been part of this Centre and have received care which has improved the quality of their life. It provides interdisciplinary services of developmental pediatricians, child attended enthusiastically by all patients with their parents, about 50 in numbers. Dr. Radha Ghildiyal welcomed the attendees of the program and gave brief overviews of the centre and its achievements till date. Dr. Vishal Warke, Director HiMedia Laboratories Pvt. Ltd., said "Since its inception HiMedia has believed in serving the society. The Autism Intervention Centre (AIC) is a dream come true for all the parents of autistic children and we are glad to support such an initiative. The need for an intervention centre like AIC was recognized when we realized School Principals from across the city approaching Sion Hospital for guidance on treatment of autistic children. Today we are proud that AIC has a team that offers comprehensive care to children with autistic spectrum disorders right from diagnosis to therapy".

Dr. Jayshree Mondkar, Dean Incharge, Lokmanya Tilak Municipal Medical College and General Hospital, Sion, Mumbai said "I would like to express my gratitude towards the Warke family for their

> continuous support to the Autism Intervention Centre (AIC). Sion hospital has been widely known for its excellent subspecialties in various divisions in the Department of Pediatrics and now with the successful completion of one year of AIC, we have added one more feather into our many feathered hat. Every child with autism is unique and we understand that a personalized autism intervention plan is what is beneficial to meet the individual's and family's need.

We at AIC, make sure that the autism intervention plan enables the child to function independently in the society".

While Autism is not rare, a multitude of people with autism in India have not been diagnosed and more critically do not receive the services they require. In response to this, the autism movement in India has come a long way in the past two decades with identification and diagnoses made at earlier ages. There have been some changes in the awareness levels in the general population. The result of a step forward in this direction is the establishment of AIC where under one roof everything is taken care of for the children with ASD in Mumbai.



psychiatrists, occupational therapists, speech language pathologists, behavior analysts, special educators all under one roof. The centre apart from treating these children has also provided with 3 parents awareness programs and one vocational training program for children and their parents. 6 of the children with low socioeconomic status taking therapy at AIC have received concessions and monetary help in the therapy fees through our social worker department.

The AIC was established on 20th December 2016, and in lieu the centre had its first year celebration with all stake holders including children and parents on 29th January 2018 at the Physiology lecture hall, LTMMC and LTMGH. The function was

NABL accredation to HiMedia Laboratories

What is National Accreditation Board for Testing and Calibration Laboratories?

National Accreditation Board for Testing and Calibration Laboratories (NABL) is an autonomous society providing Accreditation (Recognition) of Technical competence of testing, calibration, medical laboratory and Proficiency testing provider (PTP) and Reference Material Producer (RMP) for a specific scope following ISO/IEC17025:2005, ISO 15189:2012, ISO/IEC 17043:2010 and ISO/IEC 17034:2016 Standards.

HiMedia Laboratories Pvt. Ltd., (QC Microbiology Laboratory) have been assessed and accredited in accordance with the standard ISO/IEC 17025:2005 by NABL authority in the field of testing on 12th October 2017 and accreditation would be valid until 2019. Our research laboratory has very widespread scope of 394 microbiological media, which are used in three imperative sectors such as Pharmaceuticals, Medical and Food.

Advantages of Accreditation

- Laboratory accreditation provides formal recognition to competent laboratories, thus providing a ready means for customer to identify and select reliable testing measurement and calibration services.
- The description in the scope of accreditation also has advantage for the customers of

- research laboratories in assisting them to find the appropriate laboratory or testing services.
- Accreditation is an effective marketing tool for testing, calibration and measurement organisations and a passport to submit tenders to contractors, that require independently verified laboratories.
- Laboratories Accreditation is highly regarded both nationally and internationally, as a reliable indicator of technical competence, as accredited laboratories achieve a form of international recognition, and exported goods are readily accepted on overseas markets amongst the countries. This effectively reduces costs for both the exporters and the importers, as it reduces or eliminates the need for re-testing of the products in another country.
- Unlike certification to ISO 9001, Laboratory Accreditation uses criteria and procedures specially developed to determine technical competence, thus assuring customers for calibration or measurement data supplied by the laboratory are accurate and reliable.

Mr. Sandesh Pradhan

Sr. QA Regulatory Manager

For more info log on to http://www.himedialabs.com/HML/pages/certificates.aspx

Exhibitions and Conferences Upcoming Events



12 Nov 2018 - 15 Nov 2018

MEDICA 2018 Dusseldorf

Venue: Dusseldorf Exhibition Center, Düsseldorf, Germany Stand No.: 3D36



04 Dec 2018 - 06 Dec 2018

CPHI India 2018 Mumbai

Venue: Bombay Exhibition Centre, Mumbai, India Stand No.: I 61

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