Title: Mobile Science Exhibition on Gene-Health Connect Inspires Students in Regional Science Centre, Warangal

Dates: 23.08.2023 and 26.08.2023

#### Introduction

On the 23.08.2023 and 26.08.2023, the city of Warangal in Telangana witnessed an exciting and educational event that left a lasting impact on the minds of young students. The occasion was the Mobile Science Exhibition (MSE) on Gene-Health Connect, a remarkable initiative by the CSIR-Centre for Cellular and Molecular Biology (CCMB) in collaboration with the National Council of Science Museums (NCSM). This innovative exhibition aimed to educate and engage students from various schools in Warangal about the world of genetics, genetic diseases, and the importance of genetic testing. As students flocked to the Regional Science Centre (RSC) in Warangal, they embarked on a journey of discovery and learning that spanned a wide array of interactive exhibits, leaving them with a newfound understanding of genes and their role in our lives.

## **Exploring the World of Genetics**

The Mobile Science Exhibition on Gene-Health Connect was a testament to the idea that science is not confined to textbooks and classrooms but can be brought directly to the people. As students entered the exhibition space, they were greeted by a vibrant and engaging atmosphere, filled with intriguing exhibits and hands-on activities. The aim was to demystify the complex world of genetics and make it accessible to students of all ages.

One of the key objectives of the exhibition was to shed light on genetic diseases, their prevalence, and the importance of timely genetic testing. Students were introduced to the concept of genes, DNA, and the role they play in determining our traits and health. The interactive nature of the exhibits allowed them to grasp these concepts in a fun and memorable way.

The exhibits covered a wide range of topics, from the basics of DNA and genetic inheritance to the specific genetic disorders that affect millions of people in India. Through models, charts, and multimedia presentations, students learned about diseases such as thalassemia, sickle cell anemia, and cystic fibrosis. These exhibits served as eye-openers, illustrating the real-world impact of genetic variations and the significance of early detection.

#### Hands-On Learning

One of the highlights of the Gene-Health Connect exhibition was its emphasis on hands-on learning. Students were encouraged to actively participate in various activities that allowed them to explore genetics in a tangible way. For instance, they had the opportunity to extract DNA from strawberries, a process that brought the abstract concept of DNA to life.

The excitement on their faces as they watched the DNA strands emerge from the strawberry pulp was truly infectious.

Another interactive exhibit allowed students to explore genetic traits by examining their own physical characteristics. They could compare features like eye color, hair type, and tongue rolling with their peers, illustrating the principles of genetic inheritance in a relatable manner. This hands-on approach not only made learning more engaging but also empowered students to connect with the subject on a personal level.

### The Importance of Genetic Testing

Throughout the exhibition, the message of the importance of genetic testing resonated strongly. Students were educated about how genetic testing can identify potential health risks and guide individuals and families in making informed decisions about their health. Dr. Vinay K Nandicoori, the Director of CSIR-CCMB, emphasized the significance of removing the social stigma associated with genetic testing. He stressed that timely genetic testing has the potential to prevent numerous genetic diseases and that open discussions about genetics are essential for public awareness and prevention.

## Impact and Inspiration

As students explored the Gene-Health Connect exhibition, it was evident that they were not just gaining knowledge; they were being inspired. Many expressed their excitement and appreciation for the opportunity to learn about genetics in such an interactive and engaging manner. For some, it was a revelation to discover the role genes play in shaping their lives, and they left the exhibition with a newfound curiosity about science.

The exhibition also had a profound impact on teachers and educators who accompanied the students. They recognized the importance of such initiatives in making science more accessible and interesting for their students. Several teachers expressed their intention to incorporate the knowledge gained from the exhibition into their classroom lessons, further spreading the message of genetic health awareness.

#### The Role of Regional Science Centre, Warangal

The Regional Science Centre (RSC) in Warangal played a crucial role in hosting the Gene-Health Connect exhibition, which took place between August 23, 203 and August 26, 2023, from 10:30 AM to 5:00 PM. This institution has consistently served as a cornerstone for science education and outreach in the region. Its collaboration with CSIR and NCSM during this exhibition showcased a steadfast commitment to bringing science closer to the community.

The success of the Mobile Science Exhibition on Gene-Health Connect in Warangal is a testament to the potential of such initiatives in fostering scientific curiosity and awareness among young minds. During the exhibition,

approximately 500 students from various schools and members of the general public had the opportunity to explore the world of genetics, genetic diseases, and the importance of genetic testing. This event highlighted the importance of making science engaging and accessible beyond the confines of classrooms and textbooks.

Looking ahead, there is immense potential for similar exhibitions to reach more students across India, thereby creating a generation that is not only scientifically literate but also proactive in managing their genetic health. Initiatives like Gene-Health Connect are paving the way for a future where genetic testing and awareness are commonplace, ultimately reducing the burden of genetic diseases on individuals and society as a whole.

#### Conclusion:

The Mobile Science Exhibition on Gene-Health Connect, held at RSC, Warangal, between August 23 and August 26, 2023, from 10:30 AM to 5:00 PM, left a profound impact on both students and educators. It inspired a sense of wonder and curiosity about science while emphasizing the significance of making science accessible and enjoyable for all. The collaborative efforts of CSIR, NCSM, and RSC, Warangal, exemplified a shared commitment to science education and outreach. As this initiative continues to reach more students across the country, it holds the promise of creating a well-informed and proactive generation, ultimately contributing to a healthier and more aware society. The Mobile Science Exhibition on Gene-Health Connect has set a commendable precedent in the field of science education and outreach, and its impact is sure to resonate for years to come.





This mobile science exhibition vehicle will be visiting RSC Warangal. All

the staff members participated in this programme.



KUVAS school students were participated in this mobile van exhibition. Science has the immense importance it diverts the young generations to the path of science as it encourages them toinvent newer and newer things. The young mind is always motivated by scientific knowledge.



Avanthi school students are visiting to RSC to see this mobile van and they

arvery exisiting to seeing all the exhibits. They were knowing lot of new things about genetic deseases.

## Paper Clipings



# మొబైల్ సైన్స్ ప్రదర్శన ఏర్పాటు

హనుమకొండ రూరల్, ఆగస్టు 26: హనుమకొండ హంట ర్ రోడ్లోని రీజినల్ సైన్స్ సెంటర్లో శనివారం మొబైల్ సైన్స్ ప్రదర్శనను ఏర్పాటు చేశారు. వివిధ పాఠశాలల విద్యార్థులు, సైన్స్ ప్రియులు సైన్స్ సెంటరుకు చేరుకొని సైన్స్ ప్రదర్శనను తిలకించారు. ఈ సందర్భంగా క్రోమోజోములు, డీఎన్ఏ నిర్మాణం, జీన్స్, మ్యూటేషన్, జెనటిక్ వ్యాదులు, హిమోగ్డోబీ



న్, వంశవృక్షం, హానికర రక్షహీనత తదితర అంశాలపై మొబైల్ సైన్స్ ప్రదర్శనలో వివరించారు. సైన్స్ సిబ్బంది డాక్టర్ రాకేశ్, నితీష్ండ్రి, వి.వెంకటేశ్వర్రావు, అశోక్ కుమార్, రాజయ్య తదితరులు పాల్గొన్నారు.

## అబ్బురపలిచిన మొబైల్ సైన్స్ ఎగ్జిబిషన్



**కాజీపేట అర్బన్:** హనుమకొండ హంటర్*రో* డ్మ లోని రీజినల్ సైన్స్ సెంటర్లో శనివారం ఏర్పాటు చేసిన మొబైల్ సైన్స్ ఎగ్జిబిషన్ అబ్బు రపరిచింది. బెంగళూరు విశ్వేశ్వరయ్య సైన్స్ మ్యూజియం, హైదరాబాద్ సీసీఎంబీ సౌజన్యంతో నగరంలోని వివిధ పాఠశాల విద్యార్థులకు సైన్స్ పై ఆసక్తిని పెంపొందించేం దుకు మొబైల్ సైన్స్ ఎగ్జిబిషన్ను ఏర్పాటు చేశారు. డీఎన్ఏ నిర్మాణం , జీన్స్, జెనటిక్ వ్యాధులు,హీమోగ్లోబిన్ శాతం తదితర అంశా లను అధ్యయనం చేసేందుకు మొబైల్ సైన్స్ తోడ్పడుతుందని నిర్వాహకులు తెలిపారు. నగ రంలోని వివిధ పాఠశాలల విద్యార్థులు మొబైల్ సైన్స్ ఎగ్జిబిషన్ను ఆసక్తితో తిలకిం చారు. కార్యక్రమంలో రీజినల్ సైన్స్ సెంటర్ ప్రాజెక్ట్ ఆఫీసర్ రాకేష్, వెంకటేశ్వరరావు, సిబ్బంది తదితరులు పాల్గొన్నారు.