



# SDG 3: GOOD HEALTH AND WELL-BEING

## Progress Report 2023-2024

**MANAV RACHNA UNIVERSITY**

Established wide Haryana state Legislature Act  
No 26 of 2014 & under section 2(f) of UGC 1956



Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.



## PREAMBLE

WE, THE FACULTY, STAFF, AND STUDENTS OF MANAV RACHNA UNIVERSITY, recognizing that sound physical and mental health is an indispensable human right and a prerequisite for achieving a sustainable, productive, and prosperous society, hereby affirm our comprehensive commitment to the objectives of the United Nations Sustainable Development Goal 3: Good Health and Well-being.

WHEREAS preventable diseases, lack of access to affordable medical care, and insufficient health awareness continue to hinder the progress and dignity of vulnerable communities; WHEREAS our academic and clinical institutions, including the Manav Rachna Dental College and allied health science departments, are dedicated to training compassionate healthcare professionals and providing direct, high-quality medical and dental services to the local population;

WHEREAS our institution actively engages in crucial public health initiatives, including the organization of Mega Blood Donation Camps, free health check-up camps, and awareness campaigns on critical issues like drug abuse and personal hygiene, thereby extending essential services beyond the campus perimeter;

WHEREAS the well-being of the entire academic community—students, faculty, and staff—is paramount, requiring a holistic focus on fostering a secure, supportive environment that prioritizes mental health resources and promotes physical wellness through campus facilities and educational programs;

NOW, THEREFORE, BE IT RESOLVED that Manav Rachna University shall continue to leverage its academic expertise, clinical resources, and community partnerships to improve public health standards, ensure access to quality, affordable healthcare services for all, and champion a culture of holistic well-being within the university and its surrounding communities, thereby contributing directly to longer, healthier lives.

## 1. Global Context

Sustainable Development Goal 3 (Good Health and Well-being) is central to the 2030 Agenda, as a healthy population is the foundation for prosperous and sustainable societies. It aims to address a wide spectrum of health priorities, from communicable diseases to non-communicable diseases and mental health.

Its key targets include:

- Reducing the global maternal mortality ratio and ending preventable deaths of newborns and children.
- Ending the epidemics of AIDS, tuberculosis, malaria, and other communicable diseases.
- Strengthening the prevention and treatment of substance abuse.
- Achieving universal health coverage, including financial risk protection and access to quality essential health-care services.
- Supporting the research and development of vaccines and medicines.

Recent global events, particularly the COVID-19 pandemic, have underscored the fragility of health systems and highlighted the critical importance of mental health, resilient healthcare infrastructure, and equitable access to medical technology and information.

### 1.1 Relevance to Higher Education

Higher Education Institutions (HEIs) are pivotal in advancing SDG 3 through:

- Conducting cutting-edge medical and health-tech research.
- Training the next generation of healthcare professionals, managers, and policymakers.
- Promoting health and well-being on campus for students and staff.
- Engaging with communities on public health awareness and initiatives.

### 1.2 Alignment with Manav Rachna University's Mission

Manav Rachna University (MRU) is deeply committed to SDG 3 through its vision of fostering holistic development and producing socially responsible citizens. MRU's focus on interdisciplinary research, student wellness programs, and community outreach directly contributes to building a healthier society. Our initiatives aim to:

- Advance health-related knowledge through high-impact research in areas like medical diagnostics and healthcare technology.
- Support student well-being through dedicated mental and physical health programs.
- Encourage community health awareness through targeted outreach activities.

### 1.3 MRU's Strategic Commitment to the Goal

Manav Rachna University (MRU) is strategically committed to promoting good health and well-being, which directly aligns with the core purpose of SDG 3. Rooted in the belief that a healthy mind and body are prerequisites for academic and personal success, MRU adopts a holistic approach to health. Through its advanced academic programs in health-related

sciences, pioneering research in medical technology, and a robust framework for student and staff wellness, MRU actively contributes to building a healthier community both within and outside its campus walls, making health a core element of its strategic vision.

## 2. Key Initiatives and Achievements

### 2.1 Academic Integration & Research

#### 2.1.1 Curriculum Mapping:

Courses across disciplines such as Computer Science & Engineering, Management, and Psychology have integrated themes of health, healthcare management, medical technology, and mental well-being. These courses sensitize students to the complexities of the healthcare sector and the role of technology in solving modern health challenges.

#### 2.1.2 Faculty Research in Health Technology:

MRU faculty are at the forefront of health-tech innovation, publishing groundbreaking research that promises to enhance diagnostic accuracy and patient care. Key projects include:

- **Segmentation and Classification of Diabetic Retinopathy using Ensemble Deep Neural Network:** This research offers a computer-supported diagnostic model to aid ophthalmologists in the early detection of Diabetic Retinopathy, a leading cause of vision loss in diabetics. The novel ensemble deep neural network improves classification accuracy, enabling better treatment planning.
- **A novel hybrid deep belief Google network framework for brain tumor classification:** This study addresses the challenges in brain tumor identification by proposing a unique Hybrid Deep Belief Google Network (DBGN) system. The framework leverages advanced pre-processing and a novel neural network to outperform existing methods in accuracy, precision, and recall.
- **Preserving Security in Internet-of-Things Healthcare System with Metaheuristic-Driven Intrusion Detection:** Recognizing the vulnerabilities in the Internet of Medical Things (IoMT), this research proposes a novel Lion-Salp-Swarm-Optimization Algorithm (LSSOA) to detect and prevent cyber-attacks in healthcare environments, enhancing the security of critical patient data and medical devices.

#### 2.1.3 Capacity Building & Engagement

##### Workshops and Seminars:

- **Zen Zone – Navigating stress in today’s world (July 29, 2024):** This innovative workshop for BBA/MBA students focused on mental well-being and stress management. Through interactive collage activities and reflective questions, the session helped students realize the importance of supportive relationships and enhance their communication skills, directly addressing the mental health aspect of SDG 3.

## Seminar on Happiness And Well-Being

The seminar on “Happiness and wellbeing- getting back to Basics” was conducted by the E-cell of Manav Rachna University on April 12, 2024, from 10:00 AM to 11:30 AM at the I-Block Auditorium. The expert speaker for the event was Ms. Shyamasree Chakrabarty.

Ms. Shyamasree Chakrabarty is an accomplished leader known for her expertise in driving organizational transformation, enhancing employee experience and wellbeing, and developing effective leadership strategies. She has over 19 years of extensive global experience across India, ANZ, Southeast Asia, Middle East, and the US. Before starting with HappyPlus Consulting, she worked with AON for 15 years and was leading the entire Asia Pacific, Middle East, and EU markets as Consulting Implementation Head and People Analytics Lead.

The seminar was an interactive and engaging session where Ms. Shyamasree shared her insights and experiences in various areas including Employee Engagement, Happiness and Wellbeing etc. She shared with the student’s data showcasing the work done in the area of promoting happiness in different corporates workplaces, growing relevance towards this concept and why this is creating work life imbalances as understood by everyone. She also talked on the relevance of talent management and talent acquisition in workplaces today. Through a short quiz and interactive videos, students were actively involved in the session and raise their queries on the topic being discussed. The seminar provided valuable insights into how students can also take up future research in this area for better understanding the workplace trends and challenges.



### Outreach & Impact Activities

- **Project Khushi – Mental Health Outreach (Oct 12, 2023):** This initiative focused on the emotional wellness of underprivileged communities, aligning with poverty eradication through mental empowerment and social connection. It underscores the link between mental and overall health.
- **Project Kuch Kehna Hai – Awareness on Good Touch Bad Touch (Aug 5, 2022):** Conducted at Jagruti Public School, this program promoted safety and awareness among children from underserved backgrounds. It contributes to their holistic well-



being and empowers young learners from vulnerable sections, a key component of a healthy childhood.

### 3. Partnerships Addressing SDG 3

Memoranda of Understanding (MoUs) and collaborations are actively pursued with leading hospitals, healthcare organizations, and technology companies for activities like internships, guest lectures, joint research projects, and student training. These partnerships provide students with practical exposure to the healthcare ecosystem and ensure our research remains relevant and impactful.

NGOs and Industry Partners with which MRU collaborated:

- Marengo Asian Healthcare QRG
- PRME
- UNESCO MGIEP
- Amrita Hospital
- Asian Hospital
- Heartfulness Education Trust
- Sarvodaya Hospital and Research Centre

## INNOVATION & INCUBATION CENTRE

A team of students from the **Department of Computer Science and Technology (DoCST)**, Manav Rachna University, participated in the **Ideathon 2023** organized by **J.C. Bose University of Science and Technology, YMCA, Faridabad** on **8th November 2023**. The team, comprising **Rishav, Harsh, and Avdhesh Kumar Sharma**, all students of the **5th semester**, secured the **3rd Prize** among several competing teams from reputed institutions.



The students presented an innovative project based on the problem statement “**AI-Driven Navigation Assistant for Enhancing the Mobility of Blind Individuals.**” The project focused on developing an intelligent assistive system that integrates artificial intelligence and sensor technologies to help visually impaired individuals navigate their surroundings safely and independently. The proposed solution aims to improve mobility, confidence, and accessibility, thereby contributing to the empowerment and inclusion of the blind community.

The project received appreciation for its **technical innovation, societal relevance, and practical application** in addressing a critical real-world challenge. The recognition at this prestigious platform reflects the students’ strong problem-solving approach, teamwork, and ability to apply advanced technologies for social good.



This achievement also highlights the university's commitment to nurturing **innovation and social entrepreneurship** under the **Institution's Innovation Council (IIC)**, encouraging students to develop impactful solutions aligned with the United Nations Sustainable Development Goals (SDGs).

### Report on participation in Ideathon 2.0

A team from the Department of Computer Science & Technology (DoCST) — Rishav, Harsh and Avdhesh Kumar Sharma (6th semester) — achieved **1st prize** in IDEATHON 2.0 held at J.C. Bose University of Science & Technology, YMCA, Faridabad on **6 March 2024**.



The team developed an **AI-driven navigation system** aimed at empowering visually impaired individuals by facilitating both education and self-reliance. According to the university's Innovation & Incubation Centre records, the project emphasises inclusive technology and social impact.

The competition, organised by the Institution's Innovation Council (IIC) of J.C. Bose University, provided a platform for student teams to propose innovative solutions to real-world challenges.

The achievement underscores the commitment of DoCST students to technological innovation with societal relevance and adds to the institution's portfolio of awards and achievements in innovation.

### Report on participation in Sociathon

A team of students from the Department of Computer Science and Technology (DoCST), Manav Rachna University, participated in the **Sociathon** event at the **National Social Summit 2024**, hosted by **IIT Roorkee**. The team, named **Team Bring Hope**, comprised **Rishav, Harsh, and Avdhesh Kumar Sharma**, all students of the **6th semester**, DoCST. The team secured the **3rd Prize** among several participants from reputed institutions across the country.



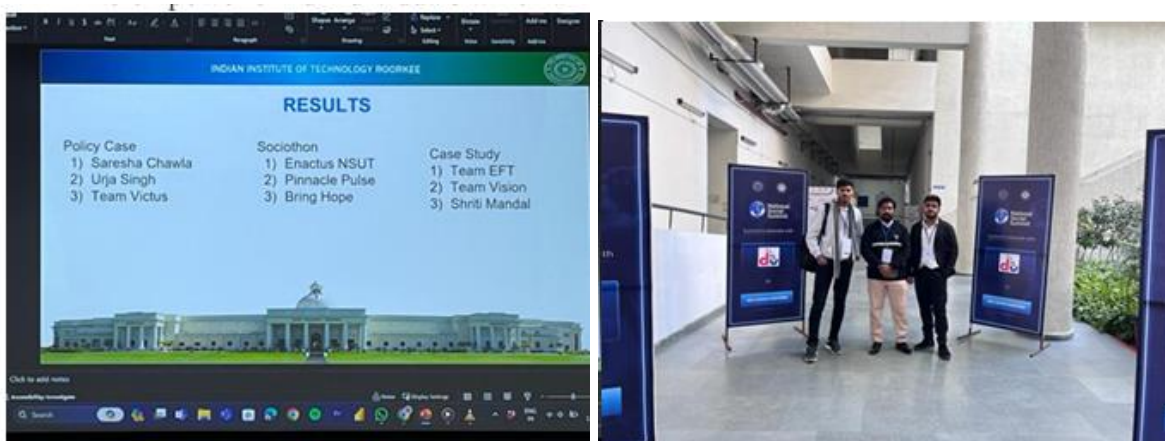
Team Bring Hope presented an innovative project titled **"AI-Driven Navigation System to Empower Blind Individuals."** The solution aims to leverage artificial intelligence to assist visually impaired individuals in navigating their surroundings safely and independently. The

system not only facilitates mobility but also integrates educational support modules to help users gain knowledge and enhance their self-reliance.

The project reflects the team’s vision of creating an inclusive society through the application of technology for social good. Their idea stood out for its **innovation, practicality, and strong social impact**, aligning with the broader goals of accessibility and empowerment for differently-abled individuals.

Participation in this prestigious event provided the students with exposure to real-world social innovation challenges, interdisciplinary collaboration, and the opportunity to present their ideas before esteemed judges and experts. The team’s success at IIT Roorkee highlights their dedication, creativity, and technical excellence.

The achievement also underscores Manav Rachna University’s commitment to promoting innovation and entrepreneurship under the **Institution’s Innovation Council (IIC)** framework, encouraging students to contribute toward building a sustainable and inclusive future.



## Outreach Activity with Dr. OP Bhalla Foundation

### Give Her Wings to Fly

The 'Give Her Wings to Fly' initiative, led by the Dr. O P Bhalla Foundation in collaboration with Manav Rachna University, is a holistic sensitization effort aimed at tackling the taboos surrounding menstruation among rural and underprivileged women. This initiative seeks to normalize discussions about menstrual hygiene within Indian households and promote personal hygiene among the female demographic. As part of our commitment to a healthier and more sustainable future, the initiative is aligned with our 'Green Planet' plantation drive. To date, we have successfully reached out to 5,000 individuals, distributing a total of 35,000 sanitary napkins to address menstrual health needs and promote environmental sustainability. Through these efforts, we strive to empower women and girls, ensuring they can manage their menstrual health with dignity and confidence.

## Event -I : Mensural Awareness and Hygiene Drive under “Give Her Wings to Fly” Initiative at Mohtabad Village

On 24th September, the “Give Her Wings to Fly” initiative, organized by the Dr. O. P. Bhalla Foundation in collaboration with Manav Rachna University students, was conducted at Mohtabad Village. The program aimed to promote menstrual health and hygiene awareness among women and girls through engaging activities such as a *Nukkad Naatak* (street play). It focused on dispelling myths, encouraging open dialogue, and ensuring access to sanitary napkins. Over 250 women and girls were reached, with sanitary napkin distribution bringing the total count under the initiative to 27,000. The collaboration with Satya Sai Foundation’s Narayan Sewa enhanced community participation, creating a supportive environment for learning. The event effectively reduced stigma around menstruation and encouraged discussions on women’s health. By combining awareness, education, and resource distribution, the initiative strengthened community well-being and reflected the Foundation’s continued commitment to empowering women through health, dignity, and inclusivity.



## Event -II : Menstrual Hygiene Awareness and Sanitary Napkin Distribution Drive at Badhkal Flyover Slums by Dr. OP Bhalla

On 14th August 2023, the Dr. O. P. Bhalla Foundation organized a *Menstrual Hygiene Awareness and Sanitary Napkin Distribution Drive* at the slums beneath the Badhkal Flyover, Faridabad. The initiative aimed to educate women and teenage girls about menstrual hygiene, promote healthy practices, dispel myths, and spread awareness about Polycystic Ovarian Disease (PCOD). Student volunteers from Manav Rachna University actively participated, enhancing outreach and fostering community engagement. Through interactive discussions, the drive encouraged open conversations about menstruation and women’s health. A total of 900 sanitary napkins were distributed, addressing essential hygiene needs and empowering women to manage their health with confidence and dignity. The initiative not only improved understanding of menstrual health but also inspired a sense of social responsibility among participating students. Overall, it reflected the Foundation’s commitment to uplifting underprivileged communities and promoting inclusivity through health awareness and women’s empowerment.



## Mammography Screening Camp

### Report on the Complimentary Mammography Screening Camp in Mohabbatabad Village

On April 26, 2024, the **Dr. O P Bhalla Foundation**, in collaboration with **Manav Rachna University**, organized a **free mammography screening camp** in **Mohabbatabad village** to promote early detection of breast cancer among women aged 40 and above. The initiative aimed to address the lack of preventive healthcare access in rural areas while spreading awareness about the importance of regular screenings and breast health education.

A total of **21 women** participated in the camp, receiving complimentary mammography screenings and personalized reports with recommendations for follow-up care, if required. The event not only facilitated early identification of potential health concerns but also empowered women with essential knowledge about preventive healthcare and cancer awareness.

Students from Manav Rachna University actively engaged in the outreach program, gaining valuable hands-on experience in community health promotion. The camp served as a platform to encourage women to prioritize regular health check-ups and adopt proactive healthcare practices.

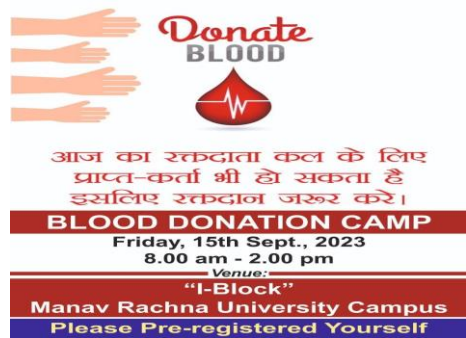
Through this initiative, the Dr. O P Bhalla Foundation and Manav Rachna University reinforced their commitment to community welfare and women's health, successfully combining medical service, awareness, and education to enhance public understanding of breast cancer prevention and early detection.



### Event: Blood Donation Camp

On September 15, 2023, a **Blood Donation Camp** was organized at **I Block, Manav Rachna University**, by the **Leo Club** in collaboration with the **Lions Club**, in memory of **Dr. O.P. Bhalla**. The event aimed to address the post-pandemic shortage of blood in hospitals while promoting Dr. Bhalla's vision of community service and compassion.

Meticulously planned over two weeks, the camp witnessed an overwhelming response with **over 800 registrations**. Activities such as **street plays, classroom talks, and awareness drives** encouraged voluntary participation and highlighted the importance of blood donation. The presence of the **Bhalla Family, Agus Indra Udayana** (Padma Shri nominee), and members of the **Lions Club** added significance to the event.



**Donate BLOOD**

आज का रक्तदाना कल के लिए प्राप्त-कर्ता भी हो सकता है इसलिए रक्तदान जरूर करें।

**BLOOD DONATION CAMP**  
 Friday, 15th Sept., 2023  
 8.00 am - 2.00 pm  
 Venue: "I-Block"  
 Manav Rachna University Campus  
 Please Pre-registered Yourself

The initiative successfully collected a substantial number of blood units for hospitals and blood banks, directly benefiting patients in need. It fostered a culture of altruism and social responsibility among students, faculty, and staff—upholding Dr. Bhalla’s enduring legacy of service to humanity.



**Visit to SHEOWS Old Age Home**

On **12th October 2023**, student volunteers from **Manav Rachna University** visited the **SHEOWS Old Age Home** near **Kalindi Kunj** to spend a day of joy and togetherness with the elderly residents. The visit aimed to foster emotional connection and bring smiles through interactive and creative activities such as **drawing, storytelling, singing, and dancing**. The lively interactions created a warm and cheerful atmosphere, highlighting the importance of compassion and companionship.



During the visit, **Dr. Bhagat**, the founder of SHEOWS, addressed the volunteers and emphasized the profound impact of community service on improving the lives of the elderly. His words motivated the students to continue their efforts toward serving underprivileged communities.

The initiative not only brightened the residents' day but also gave students a meaningful experience of empathy and social responsibility. It strengthened intergenerational bonds and inspired continued participation in community welfare activities.

## Health Camps

### Report on Free Dental Camp for Elderly Residents at Sheows Care Centre, Okhla

**Organized by:** Dr. O P Bhalla Foundation, in collaboration with the School of Dental Sciences, MRIIRS, and Manav Rachna University.

**Date:** 17th November 2023

**Location:** Sheows Care Centre, Old Age Home, Okhla, New Delhi

On 17th November 2023, Dr. O P Bhalla Foundation, in collaboration with the School of Dental Sciences, MRIIRS, and Manav Rachna University, organized a Free Dental Camp at Sheows Care Centre, an old age home located in Okhla, New Delhi. The initiative aimed to provide comprehensive dental care to the elderly residents, address their oral health needs, and promote awareness about dental hygiene. This initiative reflects Manav Rachna's commitment to serving the community and improving the well-being of senior citizens.



#### **Objective:**

The objective of the Free Dental Camp organized by Dr. O P Bhalla Foundation, in association with Manav Rachna, was to provide comprehensive dental care and promote dental hygiene awareness among the elderly residents of Sheows Care Centre, while also motivating students to engage in community service.

The camp took place at Sheows Care Centre, where a team of skilled dentists from the School of Dental Sciences, MRIIRS, conducted dental check-ups and provided necessary treatments to the residents.

**Impact:** The Free Dental Camp made a positive impact by providing essential dental care and treatment to 53 elderly residents, improving their oral health and raising awareness about dental hygiene.

**Outcome:** The Free Dental Camp resulted in the screening of 53 elderly residents, providing dental treatment to 17 patients, and offering referrals to the School of Dental Sciences, MRIIRS for further care.

## Report on Mega Health Camp at Shiv Public Senior Secondary School, Dhakiola, Faridabad

On **3rd December 2023**, the **Dr. O P Bhalla Foundation**, in collaboration with the **Public Rights Protection Forum** and **Manav Rachna University**, organized a **Mega Health Camp** at **Shiv Public Senior Secondary School, Dhakiola, Faridabad**. The camp aimed to provide essential healthcare services and promote awareness about preventive health practices within the local community.



Comprehensive health services were offered, including **blood sugar and blood pressure screenings, physiotherapy sessions, and dental care**. A specialized team from the **School of Dental Sciences (SDS), MRIIRS**, conducted dental check-ups and treatments for 13 patients—performing **ultrasonic scaling for 8** and **dental fillings for 5** out of **54 screened individuals**. Students from **Manav Rachna University** actively supported the event, assisting in patient care and spreading awareness about healthy lifestyles.

Patients requiring further attention were referred to **Manav Rachna Dental College (MRDC)** for follow-up care. The camp not only provided vital medical support but also enhanced students' experiential learning and strengthened community engagement through compassionate healthcare outreach.

## Report on the Launch of Health and Legal Aid Camps Series 2024

On **February 1, 2024**, the **Dr. O P Bhalla Foundation** and **Manav Rachna University** inaugurated the **Health and Legal Aid Camps Series 2024** at **Shri Sushma Swaraj Government College for Girls, Ballabhgarh, Faridabad**. The initiative aimed to provide accessible **healthcare and legal services** to the community while offering students practical exposure in multidisciplinary outreach.



Despite challenging weather conditions, the camp served **over 140 beneficiaries**, offering **free health check-ups** in **Dental Health, Physiotherapy, Psychological Counseling, and Nutrition & Dietetics**, supported by experts from **MRDC, SAHS, and the Department of Psychology (SBSS)**. The **School of Law** extended **legal awareness and aid**, enhancing participants' understanding of their rights and available legal support.

In partnership with **Dr. Suraj Prakash Hospital**, beneficiaries also received **general physician consultations and eye tests**. Refreshments were sponsored by the **Golden Lions Club, Faridabad Central**. The event promoted holistic well-being, empowering individuals with essential health and legal knowledge while strengthening the spirit of community engagement and experiential learning among students.

### Report on the 3rd Health Camp Organized by the Dr. O P Bhalla Foundation

On **13th February 2024**, the **Dr. O P Bhalla Foundation**, in collaboration with **MRIIRS, Manav Rachna University**, and **Dr. Suraj Prakash Hospital**, organized the **third Health Camp** at **Herman Gmeiner School, Sector 29, Faridabad**, in memory of the Late Founder, **Dr. O P Bhalla Ji**. The initiative aimed to engage student volunteers in healthcare outreach while promoting health awareness within the school community.



The camp catered to around **500 participants**, including students and teachers, offering consultations from departments such as **Dental Sciences, Physiotherapy, Nutrition, and Psychology**. These multidisciplinary services ensured a holistic approach to physical and mental well-being.



The collaborative effort provided students with valuable exposure to community service, fostering leadership and teamwork skills. The initiative enhanced **health literacy** and encouraged **proactive health management** among participants. By combining healthcare, education, and service, the camp successfully upheld **Dr. O P Bhalla Ji's vision** of building a healthier, more compassionate community.

### Report on the 7th Health Camp on 3<sup>rd</sup> March 2024

On **March 3, 2024**, the **Dr. O P Bhalla Foundation**, in collaboration with **Manav Rachna University, Dr. Suraj Prakash Hospital**, and **Kotak Life**, organized the **7th Health Camp** at the **Club House, BPTP Grandeura, Sector-82, Faridabad**. The initiative aimed to provide comprehensive healthcare services and promote community engagement through health education and creative activities.



Around **70 beneficiaries** from the local community received free consultations and treatments in **dental health, physiotherapy, nutrition, psychology, eye care, and general health**, including **blood sugar and blood pressure screenings**. Consultations with physicians and gynecologists further ensured holistic healthcare coverage.

An **art competition** for children aged **6 to 12 years**, themed “*Healthy India, Fit India,*” encouraged creative expression and awareness about healthy living. The event successfully blended healthcare and education, promoting preventive wellness and active community participation.

The camp enhanced **access to medical services** and inspired **health awareness among both adults and children**, reinforcing the Foundation’s commitment to community well-being and holistic development.

### Report on First Aid and CPR Workshop

On **March 16, 2024**, the **Dr. O P Bhalla Foundation** organized a **First Aid and CPR Workshop** at **Sneh Ashram, Greenfields, Faridabad**, an NGO dedicated to empowering women from underprivileged backgrounds through skill development. The workshop aimed to equip **50 young women** with essential life-saving skills to effectively handle emergency situations.



A **certified trainer** conducted the session, offering hands-on training in **First Aid principles** and **Cardiopulmonary Resuscitation (CPR)** techniques. A **pre-survey** helped assess participants’ existing knowledge, enabling a tailored and effective learning experience. During the training, participants practiced assessing emergencies, managing common injuries, and performing CPR with proper technique.

A **post-survey** revealed a significant improvement in participants’ confidence and practical skills. All participants received **certificates of completion**, recognizing their achievements and boosting their employability.

The workshop successfully empowered women with critical emergency response abilities, reinforcing the Foundation’s commitment to community development, women’s empowerment, and public health awareness.

### Report on the 9th Health Camp Organized by Dr. O P Bhalla Foundation

On **March 22, 2024**, the **Dr. O P Bhalla Foundation**, in collaboration with **MRIIRS, Manav Rachna University**, and **Dr. Suraj Prakash Hospital**, organized the **9th Health Camp** at

**Anangpur Village, Faridabad.** The initiative aimed to deliver accessible healthcare services and raise awareness about preventive health practices among local residents.

The camp successfully catered to **225 individuals**, offering a wide range of **medical consultations and screenings** in **Dental Sciences, Physiotherapy, Nutrition, Psychology, and Gynaecology**, along with **eye check-ups, general health consultations, and blood pressure and sugar testing**. This multidisciplinary approach ensured holistic healthcare coverage for the community.



By promoting regular health check-ups and preventive care, the camp encouraged residents to adopt healthier lifestyles. The initiative reflected a strong commitment to improving **community well-being** and expanding **access to quality healthcare**.

**Impact:** Enhanced community health awareness and improved individual health outcomes.

**Outcome:** 225 residents received essential medical services, fostering a proactive attitude toward personal and community health.

### Report on the 10th Health Camp Organized on March 31, 2024

**Objective:** To provide essential health services and consultations to the community in memory of the Late Founder, Dr. O P Bhalla Ji, through collaborative health camps.

Under the ongoing series of Health Camps in memory of the Late Founder, Dr. O P Bhalla Ji, the Dr. O P Bhalla Foundation, in collaboration with MRIIRS, Manav Rachna University (MRU), Rotary Club of NCR Golfers, FIA Charitable Society, and Dr. Suraj Prakash Hospital, organized the 10th Health Camp on March 31, 2024, at Puri Pranayam Society, Sector 82, Faridabad.

The camp provided essential health consultations to 160 individuals, who benefited from a wide range of services. Participants received consultations from various departments, including Dental Sciences, Physiotherapy, Nutrition, Psychology, and Law. Additionally, attendees had access to eye checkups, general consultations, and tests for blood pressure and sugar levels. Notably, 25 women underwent Mammography, further enhancing the health services offered. The Dr. O P Bhalla Foundation extends its heartfelt gratitude to FAHS, MRDC, FBSS, and Law for their unwavering support. Special thanks are also due to RMR for promoting the health camps through radio mentions and to the Mediashala team for capturing the event through photographs and videos, ensuring that the impact of this initiative is well-documented and shared with the community.

This health camp continues to exemplify the Foundation's commitment to promoting health and wellness in the community, honoring Dr. O P Bhalla Ji's legacy of service.



## Report: 12th Health Camp in Memory of Late Founder, Dr. O P Bhalla Ji

On 10th April 2024, the Dr. O P Bhalla Foundation, in collaboration with Manav Rachna University, MRIIRS, and Dr. Suraj Prakash Hospital, organized the 12th Health Camp at MD Public School, Ankhir Village, Faridabad, in memory of the Late Founder, Dr. O P Bhalla Ji. The initiative aimed to provide essential healthcare services to the underprivileged community while engaging student volunteers in meaningful community service.



The camp successfully catered to **324 beneficiaries**, offering consultations in **Dental Sciences, Physiotherapy, Nutrition, and Psychology**, along with **general health check-ups** that included **blood pressure and sugar testing**. These services addressed key health concerns and promoted awareness about preventive healthcare practices.

The collaborative effort highlighted the Foundation's ongoing commitment to enhancing healthcare accessibility and community well-being. Student volunteers from Manav Rachna University actively supported the initiative, gaining hands-on experience in public service and teamwork.

**Impact:** 324 individuals received vital healthcare services, improving community health awareness.

**Outcome:** Enhanced access to healthcare and early detection support, while student volunteers developed practical and service-oriented skills.

## Report: 13th Health Camp in Memory of Late Founder, Dr. O P Bhalla

On 14th April 2024, the Dr. O P Bhalla Foundation, in collaboration with Manav Rachna University, MRIIRS, and Dr. Suraj Prakash Hospital, organized the 13th Health Camp at IP Colony, Sector 31, Faridabad, in memory of the Late Founder, Dr. O P Bhalla Ji. The initiative aimed to provide essential healthcare services to the local community while offering student volunteers valuable hands-on experience in community outreach.



The camp benefited **90 individuals**, who received free consultations across multiple disciplines, including **Dental Sciences, Physiotherapy, Nutrition, Psychology, and Law**. In

addition, **general health check-ups** were conducted, covering **blood pressure and blood sugar testing** to address primary healthcare needs.

The collaborative effort reinforced the Foundation's mission to improve healthcare accessibility and community well-being. Student volunteers actively contributed to organizing and assisting healthcare professionals, fostering empathy, teamwork, and service-oriented learning.



**Impact:** 90 community members received essential medical care and guidance.  
**Outcome:** Enhanced access to healthcare and awareness of health issues, alongside experiential learning for student volunteers.

### Report: 14th Health Camp in Memory of Late Founder, Dr. O P Bhalla

On April 16, 2024, the **Dr. O. P. Bhalla Foundation**, in collaboration with **Manav Rachna University, MRIIRS**, and **Dr. Suraj Prakash Hospital**, organized the **14th Health Camp** at **Aravali College of Engineering**, Village Kasana, Faridabad, in memory of the Late Founder, **Dr. O. P. Bhalla Ji**. The initiative aimed to extend essential healthcare services to the local community while providing Manav Rachna University student volunteers with practical exposure to community service.



The camp benefitted **370 individuals**, offering consultations across departments such as **Dental Sciences, Physiotherapy, Nutrition, and Psychology**. Additionally, **legal aid** and **general medical consultations** were provided, along with **blood pressure and sugar level testing**, ensuring a holistic approach to community health.

The successful collaboration between the Foundation, Manav Rachna institutions, and Dr. Suraj Prakash Hospital highlights a shared commitment to improving healthcare accessibility and promoting community well-being.

**Impact:** 370 individuals received vital medical consultations and healthcare services.  
**Outcome:** Improved community health awareness and volunteer engagement.

## MANAV RACHNA CENTRE FOR PEACE AND SUSTAINABILITY

### ZUMBA SESSION

The Manav Rachna Centre for Peace and Sustainability organized an energetic Zumba Workshop on August 17, 2023, at the G Block Mandala, Manav Rachna University, led by renowned guest trainer Gauran Ji. The session witnessed enthusiastic participation from students and faculty, creating a lively atmosphere filled with rhythm and positivity. Through the engaging fusion of dance and fitness, the workshop aimed to promote physical wellness, mental balance, and a health-conscious lifestyle. Gauran Ji's dynamic guidance and motivating presence made the session both enjoyable and impactful, inspiring participants to incorporate fitness into their daily routines. The event was graced by Dr. Deepa Arora, Deputy Director (IQAC) and Sadbhav Mentor, along with other faculty members, reflecting the university's commitment to holistic well-being and community wellness. The workshop successfully encouraged participants to embrace an active lifestyle while strengthening the spirit of togetherness and positivity across the campus.



### Blood Donation Awareness Program

The Manav Rachna Centre for Peace and Sustainability (MRCPS), in collaboration with Clan Wild Cats and Khalbali, organized a Blood Donation Awareness Program on September 14, 2023, in front of G Block, Manav Rachna University. The event, aligned with Sustainable Development Goal 3 (Good Health and Well-being), aimed to educate and inspire students about the importance of voluntary blood donation. MRCPS volunteers played a crucial role in the initiative, showcasing exceptional commitment through diverse activities such as a *Nukkad Natak* (street play) that creatively highlighted the life-saving importance of blood donation. An engaging Question-and-Answer session and an informative Blood Donation Booth further deepened awareness, dispelling misconceptions and providing guidance on eligibility and health benefits. The registration drive encouraged students to enroll as potential donors, fostering a culture of regular blood donation. The event reflected the dedication of MRCPS

volunteers to promoting public health, community service, and sustainable well-being through impactful awareness initiatives.



## PROJECT KHUSHI

Manav Rachna Centre for Peace and Sustainability's *Project Khushi* organized a heartwarming visit titled "Spreading Smiles" on **October 12, 2023**, at **Pacific Mall, Faridabad**, as a part of its commitment to **Sustainable Development Goal 3 (Good Health and Well-being)**. The Sadbhav team engaged the public through cheerful interactions, spreading happiness, hugs, and positivity while encouraging open discussions on mental health and emotional well-being. By addressing mental health awareness in a joyful and relatable manner, the initiative highlighted the importance of psychological wellness as an integral part of overall health. *Project Khushi* beautifully reflected the organization's vision of fostering compassion, empathy, and happiness within the community, reinforcing that good health extends beyond physical fitness to include emotional balance and social connection. Through this initiative, the Centre exemplified how local, community-driven actions can meaningfully contribute to global sustainability efforts, creating a ripple effect of positivity and well-being.



Students interacting with random people, asking about their mental health as a helper and spreading happiness.

## SCAVANGER HUNT- Exploring biodiversity in university campus while playing games

Manav Rachna Centre for Peace and Sustainability organized an engaging event titled “*Scavenger Hunt – Exploring Biodiversity in the University Campus While Playing Games*” on October 19, 2023, at the Central Lawn. The event aimed to promote environmental awareness, teamwork, and mental well-being among students, aligning with Sustainable Development Goal 3 (Good Health and Well-being) and SDG 15 (Life on Land). Participants enthusiastically explored the campus to identify various plant and animal species through fun, interactive tasks, fostering a deeper appreciation for biodiversity while enjoying physical activity and mental rejuvenation. By combining education with recreation, the Scavenger Hunt encouraged mindfulness toward nature, strengthened social connections, and emphasized the link between environmental and human well-being, thereby showcasing how experiential learning can promote both ecological awareness and holistic health in an enjoyable and meaningful way.



## SELF DEFENSE WORKSHOP

On November 23, 2023, the Manav Rachna Centre for Peace and Sustainability (MRCPS) organized a Self-Defense Workshop at J Block JUG02, Manav Rachna University, to promote gender equality in alignment with Sustainable Development Goal 5 (SDG 5). Uniquely, the workshop was led by two siblings from the MRCPS community, emphasizing the strength of internal talent and community-driven empowerment. Designed for both boys and girls, the session fostered inclusivity and mutual respect while equipping participants with essential self-defense techniques. Through practical demonstrations and interactive exercises, the workshop not only enhanced participants’ physical preparedness but also instilled confidence, resilience, and a sense of safety. By utilizing in-house expertise and creating a collaborative environment, MRCPS exemplified how local initiatives can effectively contribute to gender empowerment and social responsibility, reinforcing its commitment to fostering a safer, more equitable, and self-reliant campus community.



## Journey Within- 3 days Meditation Workshop

From January 4 to 6, 2024, the Manav Rachna Centre for Peace and Sustainability organized a three-day meditation workshop titled “*Journey Within*” at the L Block Swami Vivekanand Library, Manav Rachna University. Guided by certified trainers from the Heartfulness Foundation — Mr. Deepak Bhargav, Ms. Babita Seth, Mr. Pabitra Mohan, Col. Saurav Sethi, and Mr. Vishwas — the workshop aimed to promote self-discovery and holistic well-being among teaching and administrative staff. Over 40 participants attended immersive 40-minute sessions across five batches, focusing on heartfulness and mindfulness through experiential meditation rather than lectures. The inclusion of interactive Q&A sessions encouraged reflection, sharing, and guidance, strengthening the sense of community and shared growth. Aligned with SDG 3 (Good Health and Well-being) and SDG 16 (Peace, Justice, and Strong Institutions), the initiative fostered mental clarity, emotional balance, and inner peace, contributing to the vision of a “Heartfulness Campus” that nurtures collective mindfulness and holistic well-being.



## Visit for Good Touch & Bad Touch

**Title:** MSC School Visit for Good Touch & Bad Touch

**Date:** January 18, 2024

**Venue:** MSC school Anangpur Village, Faridabad

Manav Rachna Centre for Peace and Sustainability recently organized a visit to Anangpur Village MSC School as part of their POCSO Awareness Dr. Sumbul conducted a crucial session for the "Kuch Kehna Hai" project, addressing the sensitive issues of good touch, bad touch, and POCSO awareness. Student heads Diya and Ipshita efficiently coordinated the event, ensuring its smooth execution. The enthusiastic participation of the school students reflected their engagement and receptiveness to the crucial information shared during the sessions.



## Zumba session

On January 18, 2024, the Manav Rachna Centre for Peace and Sustainability organized an energetic Zumba session titled “Zesty Zumba Jam” at the T Block Seminar Hall, Manav Rachna University, led by Rahul Sabharwal and Shruti Kumari. The session brought together 30 enthusiastic participants, creating an atmosphere of joy, movement, and community spirit. Aligned with Sustainable Development Goals (SDG) 3 – *Good Health and Well-being* and SDG 16 – *Peace, Justice, and Strong Institutions*, the event encouraged participants to embrace fitness as a fun and inclusive activity while fostering social bonds and collective harmony. Through rhythmic dance and engaging choreography, the workshop not only promoted physical health but also strengthened interpersonal connections and emotional positivity. The success of “Zesty Zumba Jam” stands as a testament to how wellness initiatives can cultivate happiness, unity, and motivation, inspiring participants to continue their fitness journey with energy, enthusiasm, and a sense of shared well-being.



## Meditation Workshop- 2 sessions

On January 24 and 25, 2024, the Manav Rachna Centre for Peace and Sustainability organized “The Magic of Meditation” workshop at the Swami Vivekananda Library and G Block Mandala, Manav Rachna University. Led by Dr. Geeta, the sessions offered participants a serene retreat to explore *Heartfulness Meditation* through soulful music and guided practices. Each 45-minute session encouraged individuals to pause, reflect, and reconnect with their inner selves, fostering calmness and emotional balance. The two-day event drew enthusiastic participation from students and staff, creating a peaceful and inclusive environment that nurtured mindfulness and well-being. Beyond personal relaxation, the workshop emphasized



community bonding and mutual understanding, as participants collectively embraced the journey toward inner peace. Aligning with Sustainable Development Goal 3 (*Good Health and Well-being*) and SDG 16 (*Peace, Justice, and Strong Institutions*), the event reinforced MRCPS's vision of promoting mental wellness, spiritual growth, and a harmonious campus culture through the transformative power of meditation.

## GUEST LECTURES

### Session - A lesson for Management, Shree Mad Bhagwat Geeta

#### Event 5 : Management Lessons from Gita

Date : 24th July, 2023

Time : 1pm- 2pm.

An interesting session was taken by Dr. Bindu Aggarwal . Topic “A lesson for Management, Shree Mad Bhagwat Geeta”. The session highlighted the Management Concept on Geeta. Dr Bindu presented the four lessons depicting Role and Responsibility ( Dharma ) Directions, Empathy , Karma , and leadership . The Students were involved in different activities related to self awareness and different types of leadership.



### Happiness And Well-Being

The seminar titled “*Happiness and Well-being – Getting Back to Basics*” was organized by the E-Cell of Manav Rachna University on April 12, 2024, from 10:00 AM to 11:30 AM at the I-Block Auditorium. The expert speaker, **Ms. Shyamasree Chakrabarty**, an accomplished leader with over 19 years of global experience in employee experience, well-being, and leadership development, shared her rich insights from her professional journey across India, ANZ, Southeast Asia, the Middle East, and the US. Drawing from her expertise at AON and HappyPlus Consulting, she emphasized the growing importance of happiness and well-being in workplaces, talent management, and employee engagement. The interactive session included engaging activities such as quizzes and videos, encouraging active participation from students. Ms. Shyamasree also presented data and real-world examples highlighting how organizations are integrating happiness into their corporate cultures. The session concluded with discussions on emerging workplace trends and research opportunities in the field of well-being.



## Activities under Dean Student Welfare

### Session on Financial Security

The *Session on Financial Security* held on **August 10, 2023**, at the **G-Block Auditorium, Manav Rachna University**, aimed to enhance students' understanding of financial literacy, investment strategies, and risk management. The session featured three expert speakers — **Mr. Amit Mawai (Assistant General Manager, SEBI)**, **Mr. Aniket Raj (Deputy Manager, NSE)**, and **Mr. Karan Kohli (Assistant Manager, NSDL)** — who provided practical insights



into savings, investments, and financial market operations. Mr. Mawai discussed regulatory frameworks and the importance of disciplined money management, while Mr. Raj elaborated on capital market fundamentals, investment types, and common misconceptions about assured returns. Mr. Kohli explained the significance of Demat accounts and compared returns across asset classes like equity and gold. The interactive session allowed students to engage directly with experts and clarify their queries. Concluding with a vote of thanks by the Dean, the event successfully empowered students to adopt informed and responsible financial practices for a secure future.

### Moksh Flashmob

The *Independence Day Flash Mob*, organized by the **Moksh Society** on **15th August 2023** at **L Block and G Block, Manav Rachna University**, was a vibrant celebration of patriotism and musical talent. The event served as an excellent platform for freshers to showcase their abilities under the guidance and support of senior members. Performances were set to three soulful patriotic songs — *Ae Vatan, Teri Mitti*, and *Maa Tujhe Salam* — delivered with energy and enthusiasm by participants including Adish, Arnab, Harsh,



Khushi, Rupesh, Jaskaran, and Piyush. Senior members like Tejas, Kashyap, Ipshita, Nischay, Harsh, and DJ Joseph ensured coordination and mentorship, making the event seamless and engaging. The flash mob not only celebrated India's Independence Day but also strengthened the spirit of unity and collaboration among students. It successfully reflected the university's cultural vibrancy and set a positive tone for future musical initiatives by the Moksh Society.

## Sports Trials

The **MRU Sports Trials**, held from **8th to 11th August 2023** across various venues at **Manav Rachna University**, served as an exciting platform for students to display their athletic talent and enthusiasm. Conducted at the volleyball and basketball courts near **B-Block**, the **Sports Arena** for badminton and table tennis, and the **football ground near Q-Block** for cricket and football, the trials saw active participation from both first-year and senior students. Under the expert supervision of the university's sports faculty, participants were evaluated on their skills, teamwork, strategy, and sportsmanship. The event aimed to promote physical fitness, competitive spirit, and a culture of sportsmanship within the campus. Through multiple rounds in each sport, students not only demonstrated their abilities but also gained valuable experience and confidence. Overall, the MRU Sports Trials successfully fostered a spirit of unity and excellence, encouraging students to pursue sports as an integral part of university life.



## First Aid & CPR Workshop

The **First Aid and CPR Training Workshop**, organized by the **Youth Red Cross Society of Manav Rachna University** in collaboration with **Sarvodaya Hospital**, was held on **24th August 2023** at the **Mandala Auditorium**. The session, led by **Dr. Surinder Singh**, Specialist in Non-Invasive Cardiology at Sarvodaya Heart Centre, aimed to enhance students' awareness of **Basic Life Support (BLS)** and **Cardiopulmonary Resuscitation (CPR)** techniques. Dr. Singh emphasized the importance of timely first aid in improving survival rates during medical emergencies and explained the **DRS ABC** steps—**Danger, Response, Shout, Airway, Breathing, and Circulation**—as a systematic approach to BLS. A live CPR demonstration on a dummy, including chest compressions and rescue breathing, provided students with hands-on experience. The use of the **Automated External Defibrillator (AED)** was also discussed, highlighting its role and limited accessibility in India. The workshop concluded with interactive student participation, making it an insightful and practical session that equipped attendees with essential life-saving skills.



## Flashmob: Success of CHANDRAYAN 3

The **Flashmob** celebrating the success of **Chandrayaan-3** was held on **24th August 2023** near **G Block, Manav Rachna University**, as a vibrant tribute to India's remarkable lunar mission. The event symbolized national pride, scientific excellence, and collective celebration of the country's achievement in space exploration. Members of **Rudra: The Dance Society** captivated the audience with a dynamic performance to "*Chak De India*", embodying the spirit of triumph and unity. This was followed by a stirring poetry recitation by a member of **Rehnuma: The Literary Society**, whose heartfelt verses honored the dedication and perseverance of India's scientists and engineers behind the Chandrayaan-3 mission. The celebration concluded with **Moksh: The Music Society** performing soulful patriotic songs, evoking strong emotions of pride and patriotism among the attendees. The event not only celebrated a milestone in India's scientific journey but also inspired the university community to embrace innovation, teamwork, and national spirit.



## Blood Donation Nukkad Natak

The **Nukkad Natak** on "**Blood Donation**", organized by **Manav Rachna University** and performed by the student society '**Khalbali**' on **5th September 2023** in front of **G Block** at **11:30 AM**, aimed to raise awareness about the life-saving importance of blood donation and motivate students to participate in the upcoming donation drive. The street play used an engaging and interactive storytelling format, drawing a large crowd with its lively performances and relatable scenes. Through humor and emotion, the performers effectively dispelled common myths and fears associated with blood donation, emphasizing that it is a safe and noble act. The event, coordinated by **Ishika Jain** and **Akshay**, was well-organized and impactful, blending entertainment with education to deliver a strong social message. The play concluded with an inspiring appeal to donate blood, leaving the audience deeply motivated to contribute towards saving lives through this compassionate initiative.



## TRUE SPIRIT FLASHMOB

The **TRUE SPIRIT Flashmob**, organized by the **RUDRA Dance Society** of **Manav Rachna University** on **19th September 2023** from **1:00 PM to 2:40 PM** at **B-Block**, was a vibrant celebration of creativity, unity, and festive spirit. Held in honor of **Ganesh Chaturthi** and marking the official launch of *TRUE SPIRIT*, the event transformed the Peace Corridor into a lively hub of rhythm and energy. Under the guidance of coordinators **Shevani** and **Kashni**, the performance featured a dynamic medley of popular songs, captivating the audience with flawless synchronization and infectious enthusiasm. Performers including **Shevani, Kashni, Anmol, Ramya, Jessica, Dimple, Akshita, Sneha, and Yuvika** delivered a power-packed performance that drew applause from students, faculty, and guests alike. Beyond entertainment, the flashmob fostered teamwork, cultural engagement, and creative expression on campus. The event's success reflected the true essence of *RUDRA*—energy, passion, and unity—setting an inspiring tone for future cultural celebrations at the university.



## Sports Week

**Sports Week 2024** at **Manav Rachna University**, held from **January 9 to January 12, 2024**, at the **Cricket Ground**, was a grand celebration of energy, enthusiasm, and sportsmanship. The event aimed to promote holistic development by encouraging students to participate in a variety of sports that fostered teamwork, discipline, and resilience. The week-long celebration provided a vibrant platform for students to showcase their athletic talent, embrace healthy competition, and build a strong sense of community.

The event kicked off with exciting matches in **volleyball, basketball, and football**, where students displayed remarkable coordination, teamwork, and skill. The energy continued with **badminton, table tennis, and cricket**, keeping both players and spectators fully engaged. Day three featured some of the most thrilling activities, including the **Mini Marathon, relay races, 100-meter sprint**, and the **Lemon Spoon Race**, while the **Tug of War** brought out the true spirit of unity and determination.

The **closing ceremony** honored winners with **trophies, medals, and certificates**, recognizing their excellence and dedication. A **Sports Workshop** conducted during the week provided insights on **nutrition, injury prevention, and career opportunities in sports**, enhancing

awareness of athletic development. Overall, Sports Week 2024 embodied the university's commitment to physical fitness, teamwork, and personal growth through the power of sports.



## Tie & Run Competition

The Tie and Run Competition was organized by Clan Wild Cats on 28th March 2024 at the Football Ground of Manav Rachna University. The event aimed to promote teamwork, coordination, and physical fitness in a fun and engaging way. Coordinated by Jaya Saini and Mehar Kaur, the competition required participants to pair up and race with their legs tied together, testing their balance, agility, and communication. The activity brought together students from various departments, creating a lively and cheerful atmosphere filled with laughter, energy, and friendly competition. Participants demonstrated great enthusiasm and teamwork as they navigated the challenge together, learning the importance of trust and cooperation. The event successfully fostered camaraderie, sportsmanship, and physical well-being while providing students with a



refreshing break from academics. Overall, the Tie and Run Competition proved to be an entertaining and memorable event that strengthened the spirit of unity and collaboration among students.

## DSW ISR

### **Nukkad Natak - Blood Donation**

The Blood Donation Camp, organized on September 15, 2023, at G Block, Manav Rachna University, was held in memory of the late Dr. O.P. Bhalla to uphold his vision of community service and saving lives through voluntary blood donation. Organized by the Leo Club and sponsored by The Lions Club, the one-day event witnessed an overwhelming response with over 800 registrations. In addition to blood donation, the camp featured engaging activities such as street plays, classroom talks, and awareness sessions that were carefully planned over the preceding weeks to promote the importance of blood donation. Teachers and staff also participated wholeheartedly, contributing to the event's success. The presence of the Bhalla Family, along with special guest Agus Indra Udayana, Padma Shri nominee, and members of the Lions Club as chief guests, added immense value to the occasion. The initiative stood as a testament to the university's commitment to compassion, social responsibility, and collective well-being.



## PATENTS

### **AI Based Driver Drowsiness Detecting Device**

**Shalu Singh, Monika Singh, Charu Jain, Shyla Shyla, Priyanka Priyanka, Jaspreet Kaur & Isha Singh**

**U.K. Design  
Patent 6307260**

- Monitors driver's eyes, facial expressions, and head movements.
- AI algorithms detect fatigue or microsleep episodes.
- Triggers alerts through vibrations, alarms, or seat adjustments.
- Prevents road accidents and enhances driving safety.

## Soil Moisture Level Indicator

<b>Shalu, Deepti Thakral</b> , Indu Dohare, Vinit Kumar, Ashish Kumar & Rajesh Punia	U.K. Design Patent 6305737
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- A low-cost sensor system measuring soil moisture content.
- Transmits data to mobile or cloud platforms via IoT connectivity.
- Alerts farmers when irrigation is required.
- Ensures efficient water usage and healthy crop growth.

## Robot for Air Conditioner Duct Cleaning

<b>Shalu Singh</b> , Anupriya Anupriya, Poonam Poonam, Narender Ranga, Priya Saharan & Vinit Kumar	U.K. Design Patent 6304988
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A compact robot designed for cleaning AC ducts internally. Equipped with rotating brushes, suction, and camera sensors. Navigates ducts autonomously while removing dust and debris. Improves indoor air quality and reduces manual effort.

## Smart Device For Mental Health Assessment

Arun Mohan Arumugam Mohan, Dhanalakshmi Komatiguntala, Kannan Vellingiri, Ranjna Jain, Neelu Chaudhary, <b>Abhishek Saxena</b> & Neelam Raut	U.K. Design Patent 6326173
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- A portable device that measures physiological and behavioral signals.
- AI algorithms analyze emotional states and stress indicators.
- Provides personalized feedback and digital mental health reports.
- Supports early intervention and mental well-being management.

## Multi-Sensor Real-Time Sorting Modular Robot

<b>Shalu Singh</b> , Shyla Shyla, Pooja Pooja, Isha Singh & Priyanka	U.K. Design Patent 6304989
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- A robotic system equipped with various vision and proximity sensors.
- Sorts materials or products based on size, color, or composition.
- Operates autonomously with adaptive modular attachments.
- Improves accuracy and speed in industrial sorting applications.

## IoT Based Automatic Biochemistry Analyzer

### Worker Reassurance Monitoring Instrument

Zatin Gupta, Isha Chopra, Sukhvinder Singh Deora, <b>Abhishek Saxena</b> & Mandeep Kaur	U.K. Design Patent 6332622
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- A wearable or fixed system for tracking worker safety and comfort.
- Monitors stress, fatigue, and hazardous exposure using sensors.
- Alerts supervisors in case of abnormal readings or distress.
- Promotes workplace safety and employee reassurance.

### Fruit Harvesting Inchworm Robot

Ajit, <b>Priyanka Gupta</b> , S.N. Deepa, Rajakumar B.R & Binu Dennis	202211057825
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- A bio-inspired robot mimicking inchworm locomotion for fruit picking.
- Equipped with vision sensors to identify ripe fruits.
- Handles fruits delicately using gripper arms to avoid damage.
- Enhances efficiency and reduces labor dependency in agriculture.

### System and Method for Monitoring Air Quality

Yaman Hooda, Vishnu Raj, Ananna Bardhan, Dinesh Kumar Sharma	202211076381A
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- IoT-enabled device that detects particulate matter and toxic gases.
- Transmits environmental readings to cloud dashboards for analysis.
- Alerts users when pollution levels exceed safe thresholds.
- Supports public health and environmental management initiatives.

### Seat Belt with Heart Rate Recognition for Ignition of Vehicle

Dr. Piyush Charan, Dr. Anshuman Sahai, Dr. Somya Asthana, Dr. Deepthi Maikhuri, Dr. Joginder Singh, Dr. Moditma	398635-001
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- Smart seat belt integrating biometric sensors for driver verification.
- Monitors heart rate before vehicle ignition and during driving.
- Prevents ignition if abnormal heart activity is detected.
- Enhances vehicle safety through integrated health monitoring.

### Glucose Monitoring Device

Jyothsna D. Kuchipudi, Bhargavi Posinasetty, <b>Dr. Piyush Charan</b> , Gaurav Dhiman, Sumana Kumar, Haewon Byeon	6304629
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- A portable device for non-invasive or minimally invasive glucose testing.
- Uses biosensors to analyze glucose levels in sweat or blood.
- Displays results instantly and can sync with smartphone apps.
- Supports diabetic patients in effective glucose management.

## **RESEARCH PUBLICATIONS**

### **Dimension Reduction in the Sagittal Plane for Diagnosis of Mild Cognitive Impairment**

Harsh Bhasin	Dimension Reduction in the Sagittal Plane for Diagnosis of Mild Cognitive Impairment
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- Uses sagittal plane imaging to extract brain region features.
- Applies dimension reduction for efficient pattern analysis.
- Supports early detection of mild cognitive impairment (MCI).
- Facilitates faster, data-efficient medical diagnosis.

### **Systematic Review of the Association between Cancer-Related Dementia and Malignancy: Systematic Review and Meta-Analysis**

Yojna Arora	Systematic Review of the Association between Cancer-Related Dementia and Malignancy: Systematic Review and Meta-Analysis
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- Reviews clinical studies linking cancer-related dementia and malignancy.
- Performs statistical meta-analysis for consistency across findings.
- Highlights neurocognitive decline among oncology patients.
- Suggests clinical pathways for managing dual morbidities.

### **Fire Alarm System Through Smoke Detection**

Yojna Arora	Fire Alarm System Through Smoke Detection
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- Develops an intelligent smoke-based fire detection mechanism.
- Integrates sensors with microcontroller-driven alert systems.
- Ensures early fire identification and safety measures.
- Reduces human and material loss through real-time alerts.

### **Intrusion Detection System for IoT-Based Healthcare Intrusions with Lion-Salp-Swarm-Optimization Algorithm: Metaheuristic-Enabled Hybrid Intelligent Approach**

Deepti Thakral	Intrusion Detection System for IoT-Based Healthcare Intrusions with Lion-Salp-Swarm-Optimization Algorithm: Metaheuristic-Enabled Hybrid Intelligent Approach
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- Proposes an IDS framework for IoT healthcare environments.
- Uses Lion-Salp-Swarm-Optimization for feature selection.

- Combines hybrid intelligence to improve threat detection.
- Enhances data security and patient privacy in IoT systems.

### **Impounding Behavioural Connotations for Hate Speech Analysis – A View Towards Criminal Investigation using Machine Learning**

Parneeta Dhaliwal	Impounding Behavioural Connotations for Hate Speech Analysis – A View Towards Criminal Investigation using Machine Learning
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- Uses ML techniques to detect hate speech patterns.
- Analyzes linguistic behavior for forensic investigation.
- Incorporates contextual emotion and intent analysis.
- Supports law enforcement in online crime prevention.

### **Preserving Security in Internet-of-Things Healthcare System with Metaheuristic-Driven Intrusion Detection**

Deepti Thakral	Preserving Security in Internet-of-Things Healthcare System with Metaheuristic-Driven Intrusion Detection
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- Develops a metaheuristic-optimized IDS for IoT healthcare.
- Enhances detection accuracy against complex cyber threats.
- Ensures secure transmission of sensitive patient data.
- Improves resilience of connected healthcare infrastructure.

### **Effectiveness of Higuchi Fractal Dimension in Differentiating Subgroups of Stressed and Non-Stressed Individuals**

Goldie Gabrani	Effectiveness of Higuchi Fractal Dimension in Differentiating Subgroups of Stressed and Non-Stressed Individuals
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- Applies Higuchi fractal dimension to analyze EEG signals.
- Differentiates between stressed and non-stressed individuals.
- Quantifies complexity in brain activity patterns.
- Demonstrates potential for mental health monitoring.

### **Segmentation and Classification of Diabetic Retinopathy using Ensemble Deep Neural Network**

Mrinal Pandey	Segmentation and Classification of Diabetic Retinopathy using Ensemble Deep Neural Network
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- Develops an ensemble DNN for retinal image analysis.
- Performs segmentation and grading of diabetic retinopathy.
- Improves accuracy through model fusion and feature learning.

- Aids in automated ophthalmic diagnosis systems.

### **A Novel Hybrid Deep Belief Google Network Framework for Brain Tumor Classification**

Urmila Pilania	A Novel Hybrid Deep Belief Google Network Framework for Brain Tumor Classification
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- Proposes a hybrid Deep Belief + GoogleNet architecture.
- Extracts deep features from MRI brain images.
- Classifies tumor types with high precision and recall.
- Enhances diagnostic support in medical imaging.

### **A Multi-Layered Assessment System for Trustworthiness Enhancement and Reliability for Industrial Wireless Sensor Networks**

Shalu	A Multi-Layered Assessment System for Trustworthiness Enhancement and Reliability for Industrial Wireless Sensor Networks
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- Designs a multi-tier trust evaluation model for IWSNs.
- Assesses node reliability and communication integrity.
- Integrates security and fault-tolerance layers.
- Improves trust and resilience in industrial IoT systems.

### **Exploring Transboundary Solutions for Forensic Investigations: An Interdisciplinary Approach to Addressing Criminal Behavioral Challenges**

Parneeta Dhaliwal & Sanjay Singh	Exploring Transboundary Solutions for Forensic Investigations: An Interdisciplinary Approach to Addressing Criminal Behavioral Challenges
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- Analyzes cross-border collaboration in forensic practices.
- Integrates psychology, law, and technology for crime analysis.
- Addresses behavioral complexities in transnational crimes.
- Promotes unified frameworks for global forensic cooperation.

### **A Novel Three-Phase Hybrid Cryptographic Algorithm for Data Security**

Shalu	A Novel Three-Phase Hybrid Cryptographic Algorithm for Data Security
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- Combines symmetric, asymmetric, and hashing cryptography.
- Provides multi-layer encryption for enhanced security.
- Balances speed, strength, and computational efficiency.
- Ensures data protection in cloud and network systems.

## **A Framework for Detection of Drone using YOLOv5x for Security Surveillance System**

Manoj Kumar & Urmila Pilania	A Framework for Detection of Drone using YOLOv5x for Security Surveillance System
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- Implements YOLOv5x for real-time drone detection.
- Applies deep learning for aerial object identification.
- Enhances security monitoring in restricted airspaces.
- Achieves high-speed, accurate detection in live feeds.

## **A Comprehensive Review of Retinal Disease Diagnosis and Open Access Datasets: Fundus and OCT Images**

Parneeta Dhaliwal	A Comprehensive Review of Retinal Disease Diagnosis and Open Access Datasets: Fundus and OCT Images
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- Surveys retinal disease diagnosis using imaging modalities.
- Reviews public datasets for fundus and OCT analysis.
- Highlights advances in deep learning-based detection.
- Identifies challenges and future research directions.

## **Integrating Multi-Modal Insights with Transfer Learning for Detecting Metastatic Breast Cancer (MBC-stage IV) Prognostics**

Manpreet Kaur	Integrating Multi-Modal Insights with Transfer Learning for Detecting Metastatic Breast Cancer (MBC-stage IV) Prognostics
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- Uses transfer learning for multi-modal cancer data integration.
- Analyzes histopathological and genomic patient data.
- Predicts metastatic breast cancer progression and survival.
- Enhances precision medicine through AI-driven insights.

## **TALKS DELIVERED BY FACULTIES**

**Invited Talk on "Role of IoT and Blockchain in Healthcare", at  
AECE2023, Noida, India**

**Prof. (Dr.)Parul Jhajharia - Resource person for the MDP at the Institute of Indian Banking and Finance to give training on the topics "Decision Decides the Destiny of an Organization - Process and Relevance of Decision Making" "Managing Time in Personal and Professional Life" and "Conflict Resolution & Negotiating Skills"**

**Prof. (Dr.) Parul Jhajharia** was invited as a resource person for the MDP at the Institute of Indian Banking and Finance to give training on the topics “Decision Decides the Destiny of an Organization - Process and Relevance of Decision Making” “Managing Time in Personal and Professional Life” and “Conflict Resolution & Negotiating Skills” for half a day on 22 May 2024. The participants included 14 government employees of the Nepal government who attended 7 Days MDP at IIBF Centre.



## Impact Metrics

### Outcome Highlights (2023–24)

Impact Area	Evidence of Outcome
<b>Research in Medical Diagnostics</b>	Published cutting-edge research on AI-based detection of Diabetic Retinopathy and Brain Tumors, enhancing the potential for early and accurate diagnosis.
<b>Mental Wellness &amp; Stress Management</b>	Conducted the "Zen Zone" workshop to equip students with stress navigation skills and "Project Khushi" to promote mental health in the community.
<b>Healthcare Career Development</b>	Organized a session with industry leaders that guided over 150 students towards impactful careers in the growing healthcare management sector.
<b>Child Safety and Well-being</b>	"Project Kuch Kehna Hai" empowered children in underserved schools with crucial knowledge about personal safety.

## Challenges and Lessons Learned

Challenge Area	Details
<b>Limited Clinical Data Access</b>	Conducting high-impact medical research often requires access to large, annotated clinical datasets, which can be a challenge due to privacy regulations and a lack of public repositories.

<b>Resource Constraints for Outreach</b>	Large-scale community health initiatives, such as medical camps or widespread mental health screening, face limitations in funding, logistics, and access to trained manpower.
<b>Stigma around Mental Health</b>	Promoting mental wellness initiatives can face challenges due to prevailing social stigma, sometimes resulting in lower participation rates than desired.
<b>Integrating Health into Curriculum</b>	While specialized courses exist, there is a challenge in integrating foundational health and wellness concepts across all disciplines to ensure every student benefits.

### Reflections and Improvements Made

<b>Area of Reflection</b>	<b>Improvement Action Taken / Planned</b>
<b>Cross-functional Coordination</b>	The creation of a university-wide Wellness Committee to formalize collaborations between departments (e.g., DSW, CSE, SMC, Psychology) for health-related events.
<b>Bridging Research and Practice</b>	Initiating plans to collaborate with partner hospitals for pilot testing of the developed diagnostic models to translate research into real-world impact.
<b>Enhanced Student Engagement</b>	Appointing student "Wellness Ambassadors" during outreach programs and on-campus events to promote leadership, reduce stigma, and encourage peer-to-peer support.
<b>Documentation and Reporting</b>	Structured event reports are now introduced with SDG tagging, clear outcomes, and participant data to strengthen impact visibility and accountability.

The journey toward addressing SDG 3 – Good Health and Well-being at Manav Rachna University has revealed the power of an interdisciplinary approach, combining technological innovation with a deep-seated commitment to human wellness. While systemic challenges like data accessibility and resource constraints exist, the institution has made conscious and impactful strides toward better research, campus-wide integration, and community engagement. These reflections provide a strong foundation for enhancing both our academic and civic responses to creating a healthier future for all.