



World Health Innovation Fellowship Report 2024

TABLE OF CONTENT

01 Introduction

02 Selection Process

03 Onboarding Process

04 Fellowship Calendar

05 Mentorship-Center-Mentor Program

06 Weekly Calendar

07 Daily Calendar

08 Events During the Fellowship

09 Hospital and Industrial Visits

10 Technical Projects

11 Cultural Activities

12 World Health Innovation Forum

13 Expenditure Report

14 Next Steps and Collaborations

15 Team and Fellows

16 Acknowledgment

Executive Summary

The World Health Innovation Fellowship (WHIF) 2024 was a transformative journey designed to empower young innovators in the healthcare sector. This report outlines the key aspects of the fellowship, including the selection process, onboarding experience, structured mentorship programs, and immersive learning opportunities.

Throughout the fellowship, fellows engaged in a dynamic calendar of technical projects, hospital and industrial visits, and expert-led mentorship sessions. The Mentorship-Center-Mentor Program provided valuable industry insights, while the weekly and daily calendars ensured a well-structured and impactful experience.

A significant highlight of WHIF 2024 was participation in the World Health Innovation Forum, where fellows showcased their innovations, connected with global leaders, and explored cross-sector collaborations. Cultural activities and networking events further enriched their experience.

The report also details key expenditures, next steps, and future collaborations, emphasizing WHIF's commitment to fostering innovation in healthcare. The success of WHIF 2024 was made possible by the dedicated efforts of the fellows, mentors, and organizing teams, whose contributions are acknowledged in this report.

This fellowship served as a launchpad for groundbreaking ideas, global partnerships, and impactful healthcare solutions, paving the way for continued innovation in the years to come.

1. INTRODUCTION :

1.1 A Peek into the World Health Innovation Fellowship

The World Health Innovation Fellowship (WHIF) launched by the Andhra Pradesh MedTech Zone (AMTZ), the world's largest medical technology manufacturing cluster, aimed at addressing critical global healthcare challenges. The fellowship serves as a unique platform for innovators worldwide to translate their ideas into actionable solutions that tackle public health issues. By leveraging AMTZ's cutting-edge infrastructure, global partnerships, and its robust ecosystem, WHIF provides an unparalleled opportunity to bridge the gap between innovation and real-world implementation.

WHIF was conceived to address a recurring challenge in the healthcare innovation landscape: the limited translation of promising technological solutions into scalable, impactful public health interventions. Many innovative ideas fail to make the necessary impact due to a lack of resources, mentorship, and policy alignment. Recognizing this gap, AMTZ established WHIF to provide innovators with the tools, training, and networks necessary to overcome these barriers. The program focuses on ensuring that projects are not only innovative but also aligned with the healthcare priorities of the innovators' home countries, creating sustainable solutions that are impactful at both local and global levels.

1.2 Grounded in Purposeful Selection

A unique hallmark of the fellowship is its rigorous selection process. Registration requires applicants to submit innovative ideas that are endorsed by their governments, either at the local or national level. These endorsements validate the relevance and importance of the proposed solutions within the applicants' home countries. This approach ensures that the fellowship attracts high-impact ideas that address real-world healthcare needs while aligning with public health policies and objectives.

Once selected, fellows embark on a six-month journey at AMTZ. During this period, their innovations are developed, refined, and supported through a combination of world-class infrastructure, mentorship, and tailored programming. This structured process enables fellows to turn their ideas into deployable solutions with the potential for widespread impact.

1.3 Comprehensive and Practical Training Approach

The WHF fellowship was designed to offer a comprehensive learning experience that integrated theoretical knowledge with hands-on training. The technical modules were meticulously curated to cover the entire lifecycle of medical devices and technologies, ensuring that fellows gained expertise in every stage of the innovation process. These modules included training in prototyping, 3D printing, regulatory frameworks, health technology assessment (HTA), and calibration, among other areas.

Training sessions were grounded in real-world biomedical cases, enabling fellows to apply their learning to practical challenges. The sessions offered deep insights into the complexities of healthcare systems and the nuances of medical device development. By working on practical case studies, fellows were able to understand the technical, regulatory, and operational aspects of healthcare innovation.

Moreover, the fellowship included structured mentorship programs where participants worked closely with experts in their fields. These mentors provided guidance on refining the technical aspects of their projects and aligning them with global healthcare standards. This blend of hands-on training and expert mentorship ensured that the solutions developed during the fellowship were technically robust and practically applicable.

1.4 Facilitating Global Networks Through Curated Interactions

In addition to technical training, WHF placed significant emphasis on fostering global connections. The program facilitated curated forums where fellows interacted with international delegations, policymakers, industry leaders, and healthcare innovators. These forums provided a platform for fellows to present their projects, engage in policy discussions, and explore opportunities for scaling their innovations.

These interactions were instrumental in bridging the gap between innovation and policy implementation. Fellows had the opportunity to align their solutions with public health frameworks and gain insights into the regulatory and operational landscapes of different countries. By engaging with stakeholders at the global level, WHF amplified the potential impact of its fellows' work and laid the foundation for future collaborations.

1.5 Encouraging Cultural Exchange and Collaboration

MHIF also recognised the importance of cultural exchange and collaboration in driving innovation. The fellowship incorporated various activities aimed at fostering intercultural bonding and teamwork among the participants. These activities included cultural events, team-building exercises, and recreational sessions designed to promote camaraderie and mutual understanding.

Training sessions were grounded in real-world biomedical cases, enabling fellows to apply their learning to practical challenges. The sessions offered deep insights into the complexities of healthcare systems and the nuances of medical device development. By working on practical case studies, fellows were able to understand the technical, regulatory, and operational aspects of healthcare innovation.

By encouraging intercultural exchange, the fellowship created an inclusive environment where fellows could share their diverse perspectives and experiences. This diversity enriched the problem-solving process, leading to more innovative and comprehensive solutions. The collaborative spirit cultivated during the fellowship extended beyond the program, fostering long-lasting professional relationships among the participants.

1.6 Hands-On Development and Ecosystem Integration

A key highlight of the fellowship was its focus on hands-on development. Fellows were immersed in the ANTZ ecosystem, where they had access to state-of-the-art facilities and industry experts. This enabled them to work on every aspect of their projects, from ideation and prototyping to testing and refinement.

The fellowship provided dedicated sessions on the regulatory and compliance requirements for medical devices, ensuring that the innovations were ready for market entry. Fellows also gained exposure to advanced technologies such as 3D printing and robotics, which were integral to the development of their projects. The program emphasized the importance of aligning innovations with regulatory frameworks and health technology assessments, equipping fellows with the skills to navigate these critical aspects of the healthcare sector.

Additionally, fellows participated in activities that allowed them to explore the broader ecosystem. They interacted with partner companies, visited hospitals, and engaged with healthcare professionals to gain insights into the real-world applications of their projects. This exposure was invaluable in shaping their solutions to meet the needs of diverse healthcare systems.

1.7 Bringing Innovations to the Public Policy Level

One of the primary objectives of WHIF was to ensure that the innovations developed during the fellowship were implemented at the public policy level. The program facilitated collaborations with global organizations and governments to create pathways for policy alignment and scalability. Fellows were encouraged to engage with policymakers and advocacy groups to promote their solutions and demonstrate their potential impact.

The program's approach of integrating innovation with policymaking ensured that the projects developed during WHIF had a clear roadmap for implementation. By bridging the gap between technological innovation and public health systems, the fellowship created opportunities for lasting impact in global healthcare.

1.8 Creating Impact Through a Holistic Approach

WHIF's holistic approach combined technical training, policy advocacy, and cultural exchange to create a transformative experience for its fellows. The program not only equipped participants with technical skills to develop innovative solutions but also prepared them to navigate the complexities of global healthcare systems.

By fostering a culture of collaboration and inclusivity, WHIF empowered its fellows to think beyond borders and work towards common goals. The program's emphasis on hands-on development, real-world applications, and policy integration ensured that the innovations created during the fellowship were both impactful and sustainable.

2. SELECTION PROCESS

The selection process for the WHF Fellowship was designed to identify and empower emerging leaders in healthcare innovation. Each applicant was required to demonstrate a deep understanding of a significant health challenge either they or their country is currently facing. This challenge had to be cross-cutting, addressing a critical gap in the global health infrastructure, and demonstrating scalability for global application. As part of the application, candidates were asked to propose innovative solutions or technologies to tackle these challenges effectively. These solutions ranged from groundbreaking projects to advanced technologies aimed at improving healthcare outcomes. To further validate the proposed health scale, applicants also submitted a letter of recognition from their respective government authorities, reinforcing the alignment of their work with national health priorities.

The evaluation process was rigorous and included a detailed assessment conducted by an esteemed global screening team and the HH-F board. This dual-layered review ensured that each candidate's proposed solution aligned with the fellowship's mission to drive transformative healthcare innovations. To address applicants' queries, provide clarity on the process, and facilitate onboarding, WHF organized comprehensive online webinars. These sessions offered valuable insights into the fellowship's structure, application expectations, and overall goals. It also served as a platform to outline the roadmap for the fellowship journey, highlighting the facilities available to fellows, opportunities for global networking, and collaboration. During the interactive sessions, applicants and fellows engaged in open discussions with the WHF team, fostering a clear understanding of the program and its objectives. This initiative reinforced WHF's commitment to supporting impactful healthcare innovations while ensuring a seamless onboarding experience for the selected fellows.

3. ONBOARDING PROCESS

The seamless arrival and onboarding experience for all WHF fellows began with arranging airport pickups on the day they landed at Vizag Airport. From the airport, the fellows were transported to their accommodation at IVY League, a state-of-the-art hostel facility housed in the AMTZ Campus. The following day, the fellows were introduced to the team and had their preliminary meeting with the Managing Director & Founder CEO of Andhra Pradesh MedTech Zone (AMTZ) Dr. JK Sharma.

During this session, the CRO warmly welcomed the fellows and presented each of them with a copy of the MILD Book, "Made in Lockdown," which gave them the glimpse of the campus and its story and served as a thoughtful gesture of inspiration and motivation. As part of their onboarding, the fellows were allocated a dedicated workspace at "DIODE," with a common meeting area with a digital setup, a coffee corner, and more to support their work. Each fellow received a comprehensive welcome kit, which included an AMTZ brochure, corner brochure, ID card, stationery, and other essentials. Additionally, with the assistance of the IT team, fellows were provided with Wi-Fi credentials and biometric access, granting them seamless entry to any building within the AMTZ campus. Depending on the nature of their projects, some fellows were also provided with desktop computers to aid their research and development activities.

Once the fellows had settled in, they were given a campus tour of AMTZ, which allowed them to explore the various advanced facilities available on-site. These facilities included Think 3D, TuV, Cobotta, iHub, Transasia, Meibio, Amphenol, Orange Kiwi, Diode, Pyramed, and others. Each of these facilities showcased the cutting-edge resources available at AMTZ, providing the fellows with a wholistic understanding of the infrastructure supporting their projects. During the tour, each fellow was introduced to a mentor who specialized in the respective area of their project. These mentors, being experts in their fields, provided valuable insights and guidance to the fellows during the course of their fellowship, ensuring they had the support needed to successfully execute their initiatives. In addition, a productive discussion was held with representatives from the various departments within AMTZ. This dialogue served to familiarize the AMTZ teams with the WHF fellows and their respective projects, fostering a collaborative environment and ensuring alignment between the fellows' goals and the expertise available within AMTZ.

4. FELLOWSHIP CALENDER & TECHNICAL TRAINING MODULES

Key Highlights of the Modules:

The World Health Innovation Fellowship 2024 featured a comprehensive curriculum with specialized tech modules, designed to equip fellows with hands-on experience and in-depth knowledge of medical device innovation and healthcare technology. These modules combined technical training, practical exposure, and global collaboration to address healthcare challenges and drive impactful innovation. Key modules covered:

- Medical Product Designing
- Africa MedTech Consortium
- Electronics Workshop
- Critical Care Equipment Hands-on Training
- Operation Theater Equipment Hands-on Training
- Industrial Visits
- Radiology Equipment Hands-on Training
- Medical Equipment Calibration
- 3D Printing
- EMI/EMC Workshop
- Assistive Technologies
- HTA Fellowship
- Risk Management & Regulatory Affairs
- Report Compilation and Paper Presentations
- WHIF Forum and MedTech Olympics
- Africa MedTech Consortium
- Electronics Workshop
- Critical Care Equipment Hands-on Training
- Operation Theater Equipment Hands-on Training

These modules provided a unique blend of theoretical learning and practical experience, fostering the development of cutting-edge solutions in global healthcare technology. The fellowship not only enhanced technical competencies but also strengthened the fellows' ability to collaborate across industries and geographies.

4.1 AMTZ Tech Clinic:

The tech clinic was a platform given to WHF Fellows to gain invaluable insights and support through the AMTZ Tech Clinic, accelerating their journey in health technology innovation.

The clinic provided them with:

- Expert Clinical Guidance – Fellows received hands-on mentorship from seasoned clinicians, helping them refine their ideas and align them with real-world healthcare needs.
- Proof of Concept & Validation – Through structured ideation sessions, they transformed concepts into tangible prototypes with clinical feasibility assessments.
- Exposure to Medical Technology Trends – Staying ahead of industry shifts, fellows gained knowledge on emerging healthcare innovations and regulatory landscapes.
- Clinical Evaluation & Trials Support – The clinic facilitated connections with healthcare professionals and trial networks, enabling data-driven product validation.
- Product Improvisation & Development – By leveraging expert feedback, fellows fine-tuned their prototypes, improving usability, safety, and efficacy for market readiness.

The AMTZ Tech Clinic has played a pivotal role in shaping the success of WHF Fellows, bridging the gap between healthcare innovation and clinical application.

4.2 Electronics Workshop

This training workshop covers the end-to-end process of PCB design using KiCad, equipping fellows with hands-on experience in schematic creation, PCB layout, and fabrication file generation.

Introduction:

This workshop provided hands-on training in KiCad, guiding participants through each stage of PCB design—from setup to generating manufacturing files.

Topics Covered:

- KiCad Setup – Installed and configured tools
- Project Initialization – Created structured project files
- Component Selection – Placed accurate components
- Symbols & Footprints – Assigned correct visuals/layouts
- Schematic Wiring – Connected components properly
- Netlist Generation – Exported schematic connections
- PCB Layout – Placed components efficiently
- Trace Routing – Routed traces with clearance
- Design Rule Check – Validated layout compliance
- Manufacturing Files – Exported Gerbers and BOM
- Final Review – Verified complete design readiness

Conclusion:

By the end of the workshop, participants had gained practical skills to design, validate, and prepare a PCB for manufacturing using KiCad.

4.3 Critical Care Equipment Hands-on Training

Topics Covered:

The fellows participated in a hands-on training at BDC, where they learned to operate, maintain, and troubleshoot critical care equipment including ventilators, monitors, infusion pumps, defibrillators, and suction machines. The training enhanced their technical skills and biomedical understanding, preparing them to support healthcare systems in resource-limited settings.

Equipments Covered:

- Ventilators
- Patient monitors
- Infusion pumps
- Syringe pumps
- Defibrillators
- Suction machines

This training empowered WHF fellows with the skills to effectively operate and maintain critical care equipment, enhancing healthcare delivery in underserved regions.

4.4 Testing & Calibration of Critical Care Equipment:

This 4 days training program provides fellows with hands-on training in surgical and radiology equipment, covering essential aspects such as various testing and calibration techniques and electrical safety testing of medical equipment. Participants will gain practical knowledge of the operation and working mechanisms of these devices, along with preventive maintenance, calibration, and troubleshooting. This comprehensive training equips candidates with the skills required to ensure the safety, accuracy, and efficiency of medical equipment in clinical settings.

Equipments Covered:

- Defibrillator
- Patient Monitor
- ECG Machine
- Syringe Pump & Infusion Pump
- CPAP & BiPAP
- Oxygen Concentrator

These visits were facilitated to provide practical demonstrations of the training conducted during the fellowship. They aimed to help fellows understand the working principles and manufacturing processes of the equipments studied, bridging the gap between theoretical learning and real-world applications.

4.5 Operation Theater Equipment Hands-on Training:

Topics Covered:

WHF fellows participated in hands-on training focused on operation theater equipment including anesthesia machines, surgical lights, electrosurgical units, and patient monitoring systems. The training enhanced their skills in equipment operation, maintenance, and troubleshooting, preparing them to support surgical procedures and improve patient care in resource-limited settings.

The hands-on training covered principal operation, troubleshooting, preventive maintenance, and testing & calibration of these devices, equipping fellows with the skills to ensure safe and efficient use in surgical settings, especially in resource-limited areas.

Equipments Covered:

- OT Light
- OT Table
- Electro Surgical Diathermy
- Anesthesia Workstation

4.6 Radiology Equipment Hands-on Training:

Topics Covered:
WHF fellows participated in radiology equipment hands-on training, covering X-ray production, radiography, technology used in X-ray machines, and X-ray machine circuits. The training also included installation, dismantling, fault finding, troubleshooting, calibration, safety in servicing, and standards & certifications for X-ray systems.

Equipment Covered:

- X-Ray Machines (30mA, 40mA, 100mA, 300mA, 500mA)
- X-Ray Circuit and Block Diagrams
- X-Ray Equipment Installation and Dismantling

4.7 3D Printing & Medical Product Designing Workshop

This workshop provided WHF fellows with hands-on training in 3D printing, design, and reverse engineering, covering key concepts and applications across industries.

Topics Covered:

- Design & Reverse Engineering: CAD software (Fusion 360, SolidWorks), scanning methods (Blue Light, Laser), and reverse engineering (Materialise Magics, GOM Inspect).

- Additive Manufacturing: Understanding FDM, SLA, DLP, MJF, DMLS, SLS, and their applications in medical devices, aerospace, and defense.

- 3D Printing Workflow: Slicing methods, printer setup, printing parameters, post-processing (support removal, IPA wash, sanding, curing).

The workshop equipped fellows with the skills to design, prototype, and manufacture parts efficiently across industries.

4.8 EMI/EMC Workshop

WIFF fellows had hands-on training in EMI/EMC testing, focusing on ensuring electronic device compatibility and compliance with international standards.

Topics Covered:

- Fundamentals of EMI/EMC testing and compliance
- Emission and immunity (susceptibility) testing techniques
- Regulatory standards and pre-compliance testing for medical devices
- EMI mitigation strategies and PCB design optimization
- Testing, calibration, and troubleshooting for device reliability

Equipment Covered:

- EMI/EMC test chambers
- Spectrum analyzers
- Signal generators
- LISNs (Line Impedance Stabilization Networks)
- RF amplifiers and antennas
- Calibration tools and measurement systems

Conclusion:

This training empowered WIFF fellows with practical knowledge and hands-on experience in EMI/EMC testing, preparing them to design compliant, interference-free electronic devices aligned with global industry standards.

4.9 Assistive Technologies

WIFF fellows engaged in hands-on training in assistive technologies, focusing on prosthetics, orthotics, and mobility enhancement techniques.

Topics Covered:

- Prosthetics and orthotics fabrication process
- Live demonstration of clinical fitment for patients
- GAIT training and assessment
- Foot scanning and mapping techniques
- Insole design and fabrication

Equipment Covered:

- Foot scanners
- GAIT analysis systems
- Orthotic and prosthetic fabrication tools
- Insole molding and finishing equipment
- Fitting and alignment tools for clinical use

The training equipped fellows with practical skills to support rehabilitation and improve mobility solutions for individuals with physical impairments.

4.10 HTA Fellowship

The Health Technology Assessment (HTA) Fellowship provided WHP fellows with insights into evaluating medical technologies based on clinical effectiveness, cost-efficiency, safety, and regulatory compliance.

Key Learnings:

- HTA Framework – Understanding its role in medical device assessment and healthcare decision-making.
- Regulatory & Compliance – Learning about medical device approvals and the importance of EMI/EMC pre-compliance for safety.
- Cost-Effectiveness & Market Access – Evaluating economic feasibility and pathways for healthcare adoption.
- Clinical & Evidence-Based Assessment – Analyzing clinical trials, risk assessment, and real-world data.
- EMI/EMC in Medical Devices – Ensuring compliance with electromagnetic compatibility standards for regulatory approval.
- Hands-on Application – Case studies and simulations for practical implementation.

Course Outcomes:

This experience equipped WHP fellows with a comprehensive understanding of medical technology development, compliance, and market integration.

4.11 Risk Management & Regulatory Affairs:

This training covered key regulatory frameworks, risk management, and quality management systems essential for medical device compliance.

Key Learnings:

- ISO 14971 & Risk Management – Understanding risk management principles, benefits, and application in medical devices, including ISO 14971:2019 clause requirements.
- ISO 13485 & Quality Management – Overview of the ISO 13485 standard for medical device quality management, focusing on regulatory compliance, documentation, and process control.

Course Outcomes:

Participants gained practical knowledge of risk assessment, regulatory requirements, and quality assurance, ensuring compliance with ISO 14971 and ISO 13485 for safe and effective medical device development.

5. MENTORSHIP: CENTER-MENTOR PROGRAM:

During the course of the fellowship, each fellow was tagged to an Industry Specialist Mentor and allocated a Center of Excellence to build their technologies. The fellows had access to these centers and mentors in the entirety of their fellowship ensuring critical guidance and feedback to expedite their prototyping journey at the campus.

5.1 Technical Centres:

5.1.1 MedValley Incubation Council:

MedValley Atal Incubation Centre, the innovation arm of AMTZ, is India's only dedicated health technology incubator, funded by NITI Aayog under the Atal Innovation Mission. It supports innovators from ideation to manufacturing with access to AMTZ's comprehensive ecosystem, including state-of-the-art labs, regulatory, and manufacturing facilities.

Spanning 23,000 sq. ft., Medi Valley offers co-working spaces, advanced biomedical engineering resources, and mentorship from top experts and policymakers. Accredited by NABL, BIS, and COSCO, it ensures quality and compliance, driving need-based MedTech innovation.

The World Health Innovation Fellows 2024 leveraged Medi Valley's cutting-edge facilities and mentorship to transform their ideas into functional prototypes, gaining hands-on experience in design, testing, and manufacturing within a globally recognized ecosystem.



5.1.3 Biovalley Incubation Council:

Bio Valley Incubation Council (BVIC), a BIRAC BioNEST incubator at AMTZ, supports startups in advancing products from lab to market. Spread across 22,500 sq. ft., it combines biotechnology and medical technology, offering state-of-the-art facilities like 3D bioprinting, regenerative medicine, stem cell culture, clean rooms, design labs, and testing/calibration labs.

Recognized by DSIR, BVIC provides mentorship, venture capital access, and R&D support, promoting innovation while reducing healthcare import dependency.

World Health Innovation Fellows 2024 benefited from BVIC's advanced infrastructure and expert guidance by leveraging their clean room facilities, enabling them to develop and refine prototypes while gaining critical market and testing support for impactful MedTech solutions.



5.1.3 Centre of Excellence Additive Manufacturing:

The Centre of Excellence on Additive Manufacturing in the Medical Device Sector at AMTZ, supported by MeitY, provided World Health Innovation Fellows 2024 with access to cutting-edge 3D printing and additive manufacturing technology. This state-of-the-art facility enabled the fellows to rapidly prototype and refine their innovative medical device concepts, significantly accelerating the design and production process.

Through hands-on training and expert guidance, the fellows leveraged the center's advanced capabilities to develop high-quality, functional prototypes aligned with global standards, fostering impactful healthcare solutions while gaining invaluable experience in next-generation manufacturing techniques.



5.1.4 Artificial Limb Centre:

The Artificial Limb Center (ALC) at AMTZ is dedicated to enhancing lives through cutting-edge prosthetic, orthotic, assistive devices, and diabetic footwear solutions. Understanding that every individual has unique needs, ALC provides customized solutions to improve mobility, comfort, and overall quality of life.

As part of their technical projects, WHF Fellows had the opportunity to work at ALC, gaining hands-on experience in the design, development, and innovation of assistive medical technologies. Their exposure to advanced prosthetic and orthotic manufacturing processes, material selection, and patient-specific customization helped them develop practical, impactful solutions for individuals with mobility challenges.

By collaborating with experts at ALC, WHF Fellows deepened their technical expertise while contributing to the advancement of assistive healthcare technologies, reinforcing their role in shaping the future of medical innovation.

5.1.5 Techpod: A Hub for Medical Device Innovation

Techpod AMTZ is a state-of-the-art facility for medical device design, prototyping, and development, enabling rapid innovation in healthcare technology.

WHF Fellows gained hands-on exposure to medical device design, rapid prototyping, regulatory considerations, and interdisciplinary collaboration. Working alongside experts, they developed practical healthcare solutions, strengthening their expertise in medical technology innovation.

5.1.6 Kulliyah Institute of Health Technology

The Kulliyah Institute of Health Technology (KIHT) plays a vital role in Health Economics and Health Technology Assessment (HTA), ensuring cost-effective and evidence-based medical innovations.

WHF Fellows benefited by gaining insights into economic evaluations, technology assessments, and policy frameworks, equipping them to develop affordable and impactful healthcare solutions. KIHT also supported the Fellows in writing and publishing Health Technology Assessment (HTA) and white papers, helping them contribute to the advancement of healthcare policy and innovation.

6. WEEKLY SCHEDULE:

The weekly schedule of the WHF Fellowship 2024 was thoughtfully crafted to offer thematic activities that supported the professional development, creative expression, and relaxation of the fellows. Each day featured a unique theme, fostering a dynamic and engaging experience. Below is a detailed summary of the weekly thematic activities:

6.1 Motivational Monday:

Fellows kickstarted the week by sharing personal motivational stories, including challenges they overcame, their achievements, and the inspiration behind their projects. These sessions encouraged fellows to exchange valuable suggestions and fostered an inspiring and supportive environment for personal and professional growth.



6.2 Thrilling Tuesday:

Medical device awareness sessions were conducted by the Indian Biomedical Skill Consortium (IBSC) Team of AMTZ. These sessions covered the scope and applications of critical care equipment, operation theatre tools, radiology devices, and quality measurement systems. Each session included 15 minutes presentations followed by interactive discussions, allowing fellows to gain in-depth knowledge of medical technologies.

6.3 Wonderful Wednesday:

Fellows engaged in insightful interactions with Heads of Departments (HoDs) at AMTZ. These sessions provided an opportunity to learn about the HODs' roles, departmental functions, and their journey within the organization. Open discussions allowed fellows to seek guidance, clarify doubts, and gather valuable insights to advance their projects.

6.4 Thoughtful Thursday:

Fellows selected a department within AMTZ based on their interests or project needs. They participated in departmental activities, observed operations, and contributed their skills and expertise. This interaction allowed fellows to collaborate with the department teams while gaining insights and inputs for their projects.

6.5 Fantastic Friday:

Fellows participated in extracurricular activities, including walkathons around the AMTZ premises, visits to the cowshed (Gaushala), and engaging in clay pottery sessions. These activities provided a refreshing break from their routine, promoting physical activity, creativity, and bonding among fellows.



6.6 Soulful Saturday:

Saturdays were dedicated to hobbies and creative expression. Fellows showcased their talents through talent shows, hobby-sharing sessions, and attended events organized by the Vizag Science & Technology Forum. Movie Screenings were also conducted to offer relaxation and an opportunity for self-expression.

6.7 Smiley Sunday:

Sundays were reserved for rejuvenation and exploration. Fellows participated in Vizag city tours, informal networking, and leisure activities, allowing them to unwind and connect in a casual setting.

The thematic activities conducted during the WHF Fellowship 2024 created a balanced and enriching experience for the fellows. By combining learning, collaboration, and relaxation, the weekly schedule ensured comprehensive personal and professional growth. These activities nurtured innovation, fostered camaraderie, and empowered fellows to excel in their individual and collective endeavors.



7. DAILY TIMETABLE

The daily schedule for the WHF Fellowship 2024 was designed to offer a holistic blend of immersive learning, technical skill-building, hands-on project work, and rejuvenating activities. The structured timetable fostered both professional development and personal growth. Below is a detailed overview of the daily structure:

7. 1 Thematic Day Activities

The WHF Fellowship 2024 daily schedule was designed to offer a holistic experience, combining professional development with personal well-being. Each day began with a thematic activity aligned with the weekly schedule, fostering an engaging start to the day. These activities included motivational storytelling on Motivational Monday, medical device awareness sessions on Thrilling Tuesday, and interactions with Heads of Departments (HoDs) on Wonderful Wednesday. Fellows also participated in departmental immersions during Thoughtful Thursday, enjoying extracurricular activities on Fantastic Friday, creative hobby-sharing on Soulful Saturday, and city exploration on Smiley Sunday. These sessions encouraged collaboration, inspiration, and learning, setting the tone for the rest of the day.

7. 2 Technical Training Modules

Following the thematic activities, technical training modules were conducted by the AMTZ technical teams to enhance the fellows' skillsets and expertise in healthcare technology. The sessions covered a range of topics, including medical product design, electronics workshops, equipment calibration, 3D printing, risk management, and regulatory affairs. These modules provided hands-on learning opportunities and advanced technical knowledge, preparing the fellows for the practical challenges of their projects.

7.3 Ecosystem Exploration

Fellows then explored the AMI2 ecosystem, interacting with partner companies, visiting centers of collaboration, and seeking guidance from the H2D help desk. These activities offered invaluable insights into the broader healthcare innovation landscape and encouraged networking. Subsequently, dedicated time was allocated for research and development (R&D) activities, where Fellows focused on prototype creation and project refinement. This phase encouraged teamwork, critical thinking, and the application of technical knowledge to real-world challenges.

7.4 Prototype, Research and Development (R&D) Activities

Dedicated time was allocated for research and development, focusing on prototype creation for individual projects. Fellows utilized this opportunity to refine their projects, collaborate with team members and apply practical knowledge to their innovative ideas.



7. 5 Project Collation and Deliberation

The day concluded with activities aimed at synthesizing and documenting the fellows' work. This included mentorship sessions, literature reviews, project planning, and report drafting. Fellows also participated in recreational activities such as visits to the cow farm, aviary, wellness, pottery, and gardening, offering a balance between work and relaxation. The WHF Fellowship 2024 daily schedule was meticulously crafted to ensure comprehensive experience for the fellows. By integrating technical training, practical project development, ecosystem exploration, and recreational activities, the program provided a balanced approach to professional and personal development. This structured approach empowered the fellows to grow as innovators and leaders in the field of healthcare technology.



8. EVENTS DURING THE FELLOWSHIP

The World Health Innovation Fellows 2024 gained invaluable exposure through technical, cultural, and social events at AMTZ, enhancing both their professional and personal growth.

- Technical Events: Hands-on workshops, regulatory sessions, and expert interactions provided deep insights into medical device development, compliance, and emerging healthcare technologies.

- Cultural Events: Engaging with fellows from diverse backgrounds fostered cross-border collaboration, idea exchange, and a broader understanding of global healthcare challenges.

- Social Engagements: Networking sessions, leadership talks, and team-building activities strengthened problem-solving skills, teamwork, and interdisciplinary learning.

These events not only refined their technical expertise but also enhanced global adaptability, collaboration, and innovation-driven thinking, equipping them to drive impactful advancements in healthcare technology.

8.1 International Events and Diplomatic Forums:

8.1.1 African Medtech Consortium



8.1.2 Western Australia Delegation Visit



8.1.3 Startup Runway Visit



8.1.i Visit of Hon'ble Minister Shri Jayant Singh Chaudhary

We were truly honoured to host Shri Jayant Singh Chaudhary, the Minister of State for Skill Development and Entrepreneurship and Minister of State for Education, during his visit to AMITZ. The Minister's guidance was a game changer for our MHF fellows!

His inspiring words emphasized the crucial role of skill development, entrepreneurship, and education in shaping the future of healthcare. He encouraged the fellows to not only innovate but to channel their expertise into real-world solutions that can drive meaningful impact. His insights sparked a renewed sense of purpose and excitement among the fellows, leaving them motivated to push boundaries and make a difference in healthcare globally.



8.2 Other Notable Events and Meets:

8.2.1 IP Pharmacopia

8.2.2 Digital Health and Universal Health Coverage Meet

8.2.3 SMLE Event

8.2.4 Indian Independence Day

8.2.5 Indian Council of Medical Research Delegation Visit

8.2.6 Global Bio-India Forum 2024

8.2.7 National Conference of Indian Society of Radiographers and Technologists

8.2.8 Global Assistive Technology Expo & Conference

8.2.9 Kenyan Delegation Visit:

8.2.10 TIECON

8.2.11 Dr. Kalam Birthday

8.2.12 Prosthetic and Orthotic Day

8.2.13 Transforming Medical Device Industry

8.2.14 CII- Confederation of Indian Industries

8.2.15 IASP-Asia Pacific Division Conference

8.2.16 Doctors Event

8.2.17 ASM International Vizag Chapter

8.2.18 ALC Event-Artificial Limb Centre

9. TECHNICAL PROJECTS

The World Health Innovation Fellowship 2024 at the Andhra Pradesh MedTech Zone (AMTZ) hosted 18 exceptional fellows from diverse backgrounds this year. Each fellow brought unique technical projects inspired by critical problem statements from their respective countries. Over the course of the program, these innovators collaborated with mentors and experts, transforming their ideas into practical, working prototypes. These fellows tackled healthcare challenges by working on technical projects inspired by problem statements from 12 different countries. Through the fellowship, participants collaborated with mentors and experts, transforming their concepts into functional prototypes and innovative solutions.

The projects showcased a broad spectrum of healthcare innovations, including:

1. Battery powered vaccine carrier
2. Metal Detector for MRI
3. CPAP Machine
4. Non-Contact Respiratory Rate Monitor for Neonatal Patients
5. Haematology Analyser
6. Dialyzer reprocessing Unit
7. AI for laparoscopy
8. Rehabilitation devices and BCI based interventions
9. Medical device training,Maintenance and regulation,HTA
10. AI based cancer detection intervention
11. Mobile Microscope
12. Oxygen Management System
13. Curate a framework to establish Health Technology Assessment and Innovation Agency in Nigeria
14. Work on Health Level 7 based technology integration
15. A telemedicine platform (Health ATM)
16. Telerehabilitation of Speaking and Hearing Skills
17. Lobiko App for Doctors, Patients and Pharmacies
18. Chronic Disease Management system

9.1 Battery powered vaccine carrier

Introducing the battery-powered, high-tech vaccine carrier, a revolutionary solution for efficient vaccine storage and transportation in remote areas. This solution was crafted by Ms. Libernet Amoateman Adjei, a fellow from Ghana, who worked on this critical problem statement during the World Health Innovation Fellowship (WHIF). This cutting-edge device incorporates solar-powered coolers to ensure vaccines remain at the optimal temperature, even in areas with limited access to electricity.

Additionally, the carrier is equipped with IoT systems that enable real-time tracking and monitoring through a mobile application, ensuring that vaccines are kept safe throughout their journey. This innovative solution is designed to overcome the challenges of vaccine distribution in underserved regions, making immunization efforts more accessible and reliable.

9.2 Metal Detector for MRI

Introducing the low-cost metal detector for MRI, designed to enhance patient safety and precision in medical imaging. This solution was crafted by Mr. Alisa, a fellow from Senegal, who worked on this critical problem statement during the World Health Innovation Fellowship (WHIF). This advanced detector is capable of identifying metals containing iron, copper, and other ferrous materials that traditional MRI detectors may miss, including metal implants. With low intensity and high sensitivity, it ensures no risk to patients while effectively alerting clinicians to the presence of any potentially hazardous metals.

This solution offers a critical advantage by detecting metal implants that conventional MRI systems often fail to identify, ensuring a safer and more accurate diagnostic process for patients.

3.3 CPAP Machine

Introducing our innovative CPAP machine, developed with a focus on providing effective respiratory support in remote areas. This solution was crafted by Mr. Charles Bah, a fellow from Gambia, who worked on this critical problem statement during the World Health Innovation Fellowship (WHIF). The dual power supply ensures the machine operates on both electrical and pneumatic sources, guaranteeing continuity of service even in areas with limited infrastructure. Its robust design makes it durable and easily transportable, while the intuitive interface allows for simple operation, even by minimally trained users. Locally manufactured using accessible materials, it offers reduced costs, making it an affordable solution. This CPAP machine is set to play a key role in reducing infant mortality in remote areas and improving the quality of life for adults with sleep apnea, ultimately enhancing healthcare access in underserved regions.

3.4 Non-Contact Respiratory Rate Monitor for Neonatal Patients

Introducing the Non-Contact Respiratory Rate Monitor for Neonatal Patients, an innovative solution developed by Mr. Patrick Cassady, a fellow from the USA, during the World Health Innovation Fellowship (WHIF).

This cutting-edge device offers a non-invasive and non-contact method to accurately monitor the respiratory rate of neonatal patients, ensuring continuous and safe monitoring without disturbing the infant. With its high sensitivity and precision, the device helps healthcare providers detect early signs of respiratory distress, offering real-time alerts for timely intervention. Designed for ease of use, it can be easily integrated into neonatal care units, providing a reliable and efficient solution to improve neonatal healthcare outcomes in both developed and resource-constrained settings. This innovation promises to enhance neonatal care and reduce the risks associated with undetected respiratory issues.

3.1 Hematology Analyzer

The hematology analyzer, developed by Mr. Moustapha Sarr from Senegal during the World Health Innovation Fellowship (WHIF), is designed as a functional and accessible solution tailored to meet the needs of hematology laboratories.

The primary objective of this project is to create an analyzer that offers accurate, reliable results while remaining affordable and easy to use in resource-constrained settings. With its user-friendly interface and compact design, this device provides a practical solution for enhancing hematology diagnostics in areas with limited access to high-end medical equipment. By addressing the critical need for accessible diagnostic tools, this hematology analyzer aims to improve the quality of care and provide timely, efficient results for better patient outcomes.

3.2 Dialyzer Reprocessing Unit

The Dialyzer Reprocessing Unit, developed by Mr. Youssoupha Diaye from Senegal during the World Health Innovation Fellowship (WHIF), offers a sustainable solution to several critical challenges in health care. By reducing high costs, this unit allows for the safe and efficient reprocessing of dialyzers, making dialysis treatments more affordable and accessible in resource-limited settings.

It plays a vital role in improving access to care, ensuring that more patients can receive life-saving dialysis without the financial burden of purchasing new equipment for every treatment. Additionally, the unit helps manage medical waste by reducing the need for single-use dialyzers, minimizing environmental impact. Most importantly, it encourages local innovation, empowering healthcare providers in underserved areas to address their own challenges with homegrown, cost-effective solutions. This innovation is set to enhance the quality and sustainability of kidney care in regions that need it the most.

3.2 AI for Laparoscopy

The integration of artificial intelligence (AI) into laparoscopic procedures, developed by Mr. Aouane Fall from Senegal during the World Health Innovation Fellowship (WHIF), offers a groundbreaking solution that enhances both the precision and efficiency of surgeries. This AI-powered system provides real-time image analysis, allowing surgeons to make informed decisions quickly and accurately during procedures.

It also offers surgical decision-making support, ensuring optimal outcomes and reducing risks. Additionally, the system facilitates advanced training for medical professionals by simulating complex scenarios, while simultaneously optimising equipment usage for better resource management. Designed to be low-cost, this solution makes high-quality surgical support accessible to healthcare providers in resource-constrained settings, ultimately improving patient care and surgical outcomes.

3.3 Assistive Robotic Rehabilitation

The Assistive Robotic Rehabilitation system, developed by Mr. Jonathan Dowda from DRC during the World Health Innovation Fellowship (WHIF), aims to revolutionize physical therapy for upper and lower limb joint exercises. By transforming traditional hydraulic resistive devices into connected (IoT) robotic assistive rehabilitation devices, this innovation enables real-time data collection and remote monitoring of patient progress. Additionally, the system incorporates a digital platform powered by artificial intelligence, which helps plan, monitor, and analyze rehabilitation data, offering personalized therapy regimens for better patient outcomes. This solution not only improves the effectiveness of rehabilitation but also makes the process more accessible, efficient, and data-driven, enhancing recovery for patients in both urban and remote settings.

1.9 Medical Device Training, Maintenance and Regulation, Mali

WHIF Fellow Spotlight: Mr. Saed from Somaliland who worked on the improvement of medical device safety and quality in Somaliland. Mr. Saed developed a white paper comparing India's Medical Device Rule, 2017 with local practices. He proposes enforcing a national regulatory framework with AMTZ's support, alongside skill-building for healthcare workers and the development of a local biomedical engineering workforce. This initiative aims to strengthen Somaliland's medical device ecosystem for safer, more effective healthcare delivery.

1.10 AI-based cancer detection intervention

Limited access to early cancer diagnostics in Mali results in late-stage detection and poor treatment outcomes, particularly in rural and underserved areas.

Solution:

WHIF Fellow Mahmoud developed an AI-based cancer detection intervention that leverages machine learning to assist in the early identification of cancer using digital medical imaging. His solution is designed to be low-cost, scalable, and integrable with existing diagnostic systems, enabling frontline health workers to detect cancer signs earlier—even in remote settings—ultimately improving survival rates and reducing diagnostic delays across Mali.

1.11 Mobile Microscope

The Mobile Microscope with AI Support, developed by Mr. Mulugeta Mideksa during the World Health Innovation Fellowship (WHIF), offers an innovative solution to transform traditional healthcare in low- and middle-income countries (LMICs). Existing microscopes in these regions are typically analog, limiting their functionality and ability to support modern diagnostic techniques.

The project aims to digitalize these microscopes, integrating them with artificial intelligence (AI) for enhanced diagnostic accuracy and real-time analysis. The mobile microscope with AI support enables healthcare professionals in resource-constrained settings to access advanced diagnostic tools, improving early detection and treatment outcomes while making healthcare more efficient and accessible.

3.12 Oxygen Management System

The Oxygen Management System, developed by Mr. Shuaibu Shehu from Nigeria during the World Health Innovation Fellowship (WHIF), aims to address the critical issue of oxygen shortages in healthcare by utilizing machine learning-based demand forecasting. This innovative solution predicts oxygen needs with greater accuracy, ensuring that supplies are aligned with actual patient demand and ultimately reducing preventable deaths. It is especially impactful for low- and middle-income countries struggling with oxygen supply challenges. The next steps include training and optimizing the model for real-world deployment, with the goal of nationwide adoption. This system has the potential to transform healthcare delivery, improve patient outcomes, and save lives, providing a scalable solution for countries facing similar challenges.

3.13 Centre a Framework to establish Health Technology Assessment and Innovation Agency in Nigeria

The AI-HTZ offers a comprehensive solution to healthcare accessibility, affordability, and innovation challenges. Based on a hub and spoke model with the hub at AMTZ, it integrates people, processes, and technology to enhance the healthcare value chain.
The Global Adoption Blueprint for Innovation and Manufacturing promotes local manufacturing of medical equipment, improving accessibility and affordability. AI-HTZ also serves as an incubator for healthcare innovations and startups and acts as a WHO Collaborating Center to standardize health innovation frameworks and guidelines. With interactive platforms for knowledge exchange and capacity building, it empowers local and global talent to drive progress. This initiative follows the framework developed by Dr. Sunny Ikenoma from Nigeria, promoting sustainable healthcare innovation and equity.

3.14 Work on Health Level 7 based technology integration

The SPICE Open-source project, developed by George Bush, a WHIF fellow from Kenya, is a transformative digital public good designed to enhance integrated, longitudinal primary care by enabling risk-based longitudinal management and establishing a bi-directional linkage between community and facility. It offers clinical decision support at all tiers of the health system and provides population health dashboards to monitor diseases, improving health outcomes. Fully compliant with the FHIR interoperability standard, SPICE ensures seamless data exchange across systems. As an open-source DPG and global good for health, it aims to demonstrate healthcare innovation.

To ensure its success, it is essential to allocate appropriate time and resources, assess architectural trade-offs, and invest in training and the FHIR community, while recognizing the long-term value of FHIR standards in driving sustainable, scalable healthcare solutions.

3.15 A telemedicine platform: Health ZIM

Mr. Edwin Lubanga, a WHIF fellow from Kenya, has developed an innovative platform designed to address the challenges in Kenya's healthcare payment models, where only 23% of the population has access to health insurance. Current value-based payment models often shift utilization and risk without improving the financial health of patients and doctors. This platform proposes a solution by connecting patients and doctors within a narrow network for diagnostics and treatments, enhancing the efficiency of healthcare delivery. It integrates as-risk contracting, allowing healthcare providers to assume financial responsibility for the care of patients in exchange for financial incentives. Additionally, the platform leverages data monetization to create value from healthcare data assets and provides liquidity providers to ensure smooth financial transactions. It also introduces a health savings vehicle to empower patients to save and plan for their healthcare needs, ultimately creating a sustainable and efficient system that benefits both patients and healthcare providers.

3.16 Innovative Solution for Speech and Hearing Therapy

MEDPHONIA, developed by Ms. Weronika Skorecona, a WHF Fellow from Poland, is an innovative online platform for telerehabilitation that transforms speech, hearing, and sensorimotor therapy. Using interactive, music-based exercises and AI-driven live corrections, MEDPHONIA enables real-time, personalized therapy, enhancing patient engagement and improving rehabilitation efficiency. The platform is designed to increase accessibility and cost-effectiveness, providing scalable, clinically validated solutions for both therapists and patients. MEDPHONIA aims to revolutionize traditional rehabilitation methods by offering a cutting-edge approach that speeds up recovery while making therapy more accessible to a wider audience.

3.17 Lobiko-App for Doctors, Patients and Pharmacies

Lobiko-App, developed by Mr. Molaiko Makumata from the Democratic Republic of Congo (DRC), is an innovative mobile application designed to overcome the significant healthcare access challenges in the country, particularly in rural areas with limited infrastructure and internet connectivity. The app connects patients, doctors, pharmacies, and delivery personnel, enabling seamless communication and access to essential healthcare services. By bridging these gaps, Lobiko-App aims to improve the efficiency of healthcare delivery, enhance accessibility, and ensure timely access to medication and consultations. This platform has the potential to transform the healthcare system in the DRC, making healthcare services more inclusive and accessible, particularly in underserved areas.

3.18 Digital Immunization Management System

To strengthen immunization programs in Kenya, particularly in the wake of the disruptions caused by the Covid-19 pandemic, Ms. Irene M Martha, a WHF Fellow from Kenya, has developed a digital platform to enhance routine immunization coverage and integrate Covid-19 vaccinations into regular vaccine schedules. This platform includes normative guidelines to provide clear, context-specific instructions for healthcare workers, ensuring consistent delivery of immunization services.

To strengthen immunization programs in Kenya, particularly in the wake of the disruptions caused by the Covid-19 pandemic, Ms. Irene M Mbithe, a WHIF fellow from Kenya, has developed a digital platform to enhance routine immunization coverage and integrate Covid-19 vaccinations into regular vaccine schedules. The platform includes narrative guidelines to provide clear, context-specific instructions for healthcare workers, ensuring consistent delivery of immunization services. It also features DAKI (Data Analysis Kit) for tracking and analyzing immunization data, facilitating better decision-making. Machine-readable recommendations are integrated into the platform to guide healthcare providers with real-time, evidence-based suggestions for patient care. Additionally, the platform includes reference software to standardize processes and ensure compliance with health standards, while precision health models enable tailored immunization strategies that address the unique needs of different populations, ensuring a more targeted and effective approach to immunization in low-resource settings.

10. CROSS COUNTRY HOSPITAL & INDUSTRIAL VISIT :

To support the technical projects of the fellows, the World Health Innovation Forum served as a vital facilitator, connecting them to hospitals and healthcare facilities relevant to their areas of focus. This collaboration played a crucial role in providing the fellows with real-world insights, clinical validation, and practical feedback, ensuring their prototypes and solutions were well-aligned with on-ground healthcare needs. By bridging the gap between innovation and implementation, the forum enhanced the impact and applicability of the fellows' projects, empowering them to create meaningful advancements in global health technology.

10.1 Visit to Sri Sathya Sai Hospital, Bangalore



10.2 Visit to GE Healthcare, Bangalore



11. Visits to Medical Device Manufacturing Units:

As part of the fellowship, MHF Fellows had exposure to cutting edge medical device manufacturing the unique opportunity to gain firsthand exposure to a wide range of medical device manufacturing facilities, enhancing their understanding of the healthcare technology ecosystem. This experience provided them with deep insights into:

- **IVD (In Vitro Diagnostics) Manufacturing Facility** – Understanding the development and production of diagnostic devices critical for disease detection and management.
- **Superconducting Magnet Facility** – Exploring advanced magnetic technologies used in imaging systems like MRI machines.
- **Sensor & PCB Manufacturing** – Learning about the role of sensors and printed circuit boards in medical devices, from diagnostics to patient monitoring.
- **Metal Injection Molding (MIM) for Surgical Equipment** – Observing end-to-end manufacturing of precision surgical tools and implants.
- **Biochemistry Analyzers, MRI, and CT Machines** – Gaining insights into the production of essential diagnostic imaging and laboratory equipment.
- **PPE Kits & Medical Textiles** – Witnessing the manufacturing of protective gear ensuring healthcare worker and patient safety.
- **Gloves Manufacturing** – Learning about the production process of essential medical gloves used in clinical settings.
- **Sheet Metal Fabrication** – Observing how precision-engineered metal components contribute to durable medical devices.
- **Oxygen Concentrators & Surgical Staplers** – Understanding the design and production of life-saving respiratory equipment and surgical tools.
- **UHMWPE, Biopolymers & Advanced Materials** – Exploring the role of high-performance materials in medical implants and disposables.
- **Nanomaterials Manufacturing** – Gaining exposure to the next generation of materials revolutionizing drug delivery and medical device coatings.

Through this hands-on experience, WHF Fellows developed a comprehensive understanding of the medical technology manufacturing landscape, equipping them with the knowledge needed to innovate, develop, and contribute to the future of healthcare solutions.

12. Cultural Activities

12.1 Senegalese Festival

On August 23rd, the WHF fellows from Senegal joyfully celebrated the "Grand Magal de Touba," a significant religious festival for the Mouridles, a prominent Muslim brotherhood in Senegal. In a heartwarming display of cultural exchange and community spirit, the fellows, with the support of the AMTZ food court staff, prepared a traditional Senegalese dish. AMTZ generously provided the raw materials and cooking facilities, enabling the fellows to share their culture and traditions with everyone on campus. The festive meal was distributed among all, creating a vibrant atmosphere of unity and mutual respect while highlighting the diversity and inclusivity that the WHF fellowship embodies.



12.2 Navaratri Festival:



13. World Health Innovation Forum:

The World Health Innovation Forum 2024, was hosted at the Andhra Pradesh MedTech Zone (AMTZ) Visakhapatnam, is a global platform dedicated to advancing innovation in healthcare and medical technology. Bringing together visionaries, industry leaders, innovators, and policymakers, the forum fosters collaboration to address critical challenges in global health.

The event emphasizes cutting-edge innovation, world-class testing facilities, and opportunities to connect with a robust ecosystem of industry stakeholders. With a focus on driving impactful solutions, the forum is a catalyst for transformative growth in the medtech and healthcare sectors.

The World Health Innovation Fellowship was a testament to AMTZ's commitment to advancing global healthcare through innovation and collaboration. By providing a platform for innovators to develop and implement their ideas, the fellowship played a pivotal role in addressing critical healthcare challenges.

Participation and Presentations:

As part of the culmination of the World Health Innovation Fellowship, fellows had the unique opportunity to present their research project outcomes during the World Health Innovation Forum (WHIF) 2024, held at the Kalam Convention Centre in Andhra Pradesh MedTech Zone (AMTZ), Visakhapatnam. Their presentations, built around problem statements and solutions developed during the fellowship, were strategically integrated into the forum's broader agenda—aligning closely with panel discussions and thematic sessions led by global healthcare leaders.

WHIF 2024 witnessed participation from over 60 countries and included representatives from WHO, PATH, ICMR, the World Trade Center, and leading medtech startups, healthcare incubators, and academic bodies. Over 200 exhibitors showcased state-of-the-art technologies, setting a dynamic stage for innovation exchange.

Through their involvement, fellows gained direct exposure to international stakeholders regulators, policymakers, technology investors, and global health executives relevant to the scale-up, validation, and deployment of their innovations. These interactions enabled fellows to explore collaborative pathways, pilot partnerships, and market access opportunities beyond India.

The presence of renowned speakers such as Dr. Jitendra Sharma (MD & Founder CEO, AMTZ), Dr. Tom Judd (Global Clinical Engineering Alliances), Dr. Rob Abbott (CEO, BIPOM), and Millicent Atkin (Bio 360) further enriched the experience. Fellows' presentations served as real-world case studies in discussions around sustainable medtech development, clinical engineering, and global health resilience.

Their active participation at WHIF 2024 positioned the fellows not only as innovators but also as emerging contributors to international healthcare discourse reinforcing the fellowship's role in fostering globally relevant, scalable health-tech solutions.

Through its comprehensive training modules, cataract interactions, and focus on policy alignment, WIIF created a pathway for sustainable impact in global healthcare. The program's success lay in its ability to integrate innovation with real-world applications, creating solutions that were not only technically sound but also aligned with public health needs.

The legacy of WIIF will continue to inspire and guide future innovators, demonstrating the power of collaboration and innovation in transforming healthcare systems worldwide.



14. Next Steps & Collaborations:

Building upon the success of the World Health Innovation Fellowship 2024 (WHIF), the program is now set to expand its reach, strengthen its ecosystem, and accelerate the impact of health innovators worldwide. The next phase will focus on deepening international collaborations, increasing support for fellows, and ensuring that groundbreaking healthcare solutions are effectively implemented across diverse healthcare systems.

A critical priority is the expansion of strategic global partnerships with leading organizations dedicated to healthcare innovation, policy, and investment. WHIF aims to collaborate with The Rockefeller Foundation to explore funding opportunities for scaling impactful health interventions and with the Bill & Melinda Gates Foundation to align with their global health initiatives in diagnostics, maternal and child health, and infectious disease control.

Engagements with ISPOR (International Society for Pharmacoeconomics and Outcomes Research) will enhance the fellowship's approach to health technology assessment and market access, while collaboration with IASP (International Association of Science Parks and Areas of Innovation) will integrate WHIF with global science and technology parks, offering incubation and commercialization pathways for fellows. Additionally, WHIF will work closely with organizations like PATH, UNICEF, and WHO Collaborating Centers to facilitate mentorship, regulatory pathways, and policymaking engagement.

The program will also focus on scaling its innovation and incubation support by introducing new global hackathons and regional accelerators, targeting innovators from Africa, Latin America, and Southeast Asia. By broadening the selection process, WHIF aims to create a more diverse pool of fellows who can drive meaningful change in their respective regions. Furthermore, stronger partnerships with medtech hubs, investors, and regulatory bodies will allow fellows to expedite prototyping, secure funding, and fast-track market access for their innovations. The program will also deepen engagement with venture capital firms and impact investors to ensure startups emerging from the fellowship receive sustained financial backing.

To institutionalize WHIF as a global health innovation hub, the program will work towards integrating its efforts with national health policies and international trade bodies. Strengthening collaborations with government ministries, regulatory agencies, and trade organizations will help in incorporating innovative solutions into mainstream healthcare frameworks. Additionally, WHIF will focus on cross-border knowledge exchange by establishing long-term partnerships with universities, research institutions, and leading medtech incubators, enabling continued support for fellows beyond their six-month engagement at AMIZ.

Lastly, the fellowship will emphasize alumni engagement and mentorship through the creation of a WHIF Global Network, fostering ongoing collaboration among past and present fellows. This initiative will ensure a continuous exchange of knowledge, mentorship opportunities, and sustained impact across healthcare ecosystems.

The World Health Innovation Fellowship 2026 has established itself as a dynamic platform for advancing global health solutions. Moving forward, WHIF is committed to fostering a robust, interconnected network that empowers entrepreneurs, accelerates innovation, and drives sustainable healthcare transformations worldwide.

WHiF Governing Body:























WNIF 2024 Cohort





Ghana





Senegal





Gambia





USA





Senegal





Senegal





Senegal





Democratic Republic of Congo





Somalia





Mali



Ethiopia



Nigeria



Thailand



Kenya



Kenya



Poland



Democratic Republic of Congo



Kenya

Team WHIF:



Acknowledgment

The successful completion of the World Health Innovation Fellowship (WHIF) is a testament to the collective effort of many individuals and teams whose support and dedication have been crucial to the program's success.

First and foremost, our sincerest gratitude to Dr. Jitendra Sharma, MD & CEO of AMTZ, whose visionary leadership has been the driving force behind the fellowship. His guidance, passion for excellence, and unwavering commitment have been pivotal in realizing the fellowship's objectives.

Equally deserving of gratitude are the esteemed Board Members of the fellowship, whose continued support and strategic guidance have been essential in the successful execution of the program. Their expertise and dedication to the mission of WHIF ensured that the fellowship maintained its high standards of quality and relevance, and their counsel has been invaluable in steering the fellowship towards its accomplishments.

The core team, consisting of Mohini, Anisha, Pragati, Manasa and Priyanka, has been fundamental in ensuring the smooth execution of the fellowship. Their organizational skills, attention to detail, and tireless efforts behind the scenes ensured that every logistical and operational aspect was executed flawlessly, enabling the fellows to focus on their work and innovation.

Sincere thanks are also owed to the Heads of Departments at AMTZ, including Mr Naresh, Ms Sunanda, Ms Geetha, Mr Suraj, Mr Santosh, Dr Mahesh, Mr Rishi, Dr Sucheela, Mr Amit, Dr Santosh, Dr Sushmita, Dr. Radhika, and Mr Dilip. Their leadership and mentorship have created an environment conducive to learning, growth, and innovation. Their support was invaluable in enabling the fellows to navigate complex challenges and broaden their expertise in health innovation.

The contributions of the MD Office, along with their exceptional teams, have been crucial to the program's success. Special thanks are due to Dr Kavita, Mr Nishant, and Mr Prashant, whose commitment to detail and flawless coordination of logistics ensured the smooth functioning of the fellowship at every stage.

Appreciation is also extended to the finance team, technical SPOCs, and the champions of upskilling, including IBSC, BMC, MMC, ALC, Cell AM, and KHT, for their pivotal role in providing critical technical support and in facilitating the fellows' learning and innovation. Their efforts were integral in creating a framework that allowed fellows to push the boundaries of their creativity and expertise.

The support of MTS, Ms Sanjam and Mr Nallarasu also warrants recognition for their exceptional hospitality and for creating an environment that made the AMTZ campus a place where both professional growth and personal connections flourished. The atmosphere provided by the MTS team allowed fellows to work in harmony and thrive.
Finally, the fellowship would not have been possible without the fellows themselves. Their brilliance, creativity, and commitment to advancing global health have been at the heart of the program. The projects they have developed, and the challenges they have overcome, stand as a testament to their perseverance and innovation. Their collective efforts have set a new standard for what can be achieved in the field of global health innovation.

This fellowship has been a powerful reminder of the incredible potential that arises when diverse minds come together with a shared mission. The breakthroughs, collaborations, and innovations initiated during this fellowship will continue to influence the landscape of global health for years to come. The contributions of all those involved have made a lasting impact, and the work of the fellowship will resonate far beyond these pages.

The WHIF team extends its deepest gratitude to all who have contributed to the success of the fellowship. Their collaboration has made this initiative an extraordinary achievement, and its legacy will continue to shape the future of global health innovation.

Our Partners

