

DOW UNIVERSITY OF HEALTH SCIENCES

To Heal To Educate To Discover



STRATEGIC PLAN (2024 - 2030)

Pioneering Excellence | Inspiring Innovation

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

◀ IN THE NAME OF ALLAH ▶



To Heal ♦ To Educate ♦ To Discover

VICE CHANCELLOR'S MESSAGE



Prof. Mohammed Saeed Quraishy T.I
Vice Chancellor
Dow University of Health Sciences

In 2018, Dow University of Health Sciences implemented its bold and innovative strategic plan entitled “*A Bridge to Excellence*”. It was designed to be implemented in multiple phases of which, Phase I (2018 – 2023) has been successfully completed. As we reflect on the period from 2018 to 2023, I am immensely proud of the progress we have made as a University. Together, we have achieved significant milestones in education, research, clinical care, and community engagement. These achievements are a testament to the dedication, innovation, and collaboration of our faculty, staff, students, and community partners.

Our journey thus far has strengthened our position as a leader in healthcare education and service. We have created new undergraduate and postgraduate degree programs that are aligned with the burgeoning workforce needs. This along with our enhanced research capacity and markedly expanded clinical footprint has afforded the University a unique opportunity to engage with highly reputable regional and global institutions of higher education to continue to innovate and blaze a path to excellence.

Our Nation’s resilience was tested in 2019 following the outbreak of SARS-CoV-2 (COVID-19) infection. Our faculty, staff, and students stepped up to address the unprecedented challenges of this pandemic which had the potential to cripple global economy. Our efforts to combat this presumably once-in-a-lifetime event has been documented in the annals of this plan for posterity and as a reminder of our commitment to the community and our leadership role in healthcare both at the provincial as well as the national level.

As a University, our greatest assets are our students and to prepare them for success in the 21st century, in 2023, the University established an Emerging Leadership Academy. This initiative was designed to develop leadership skills among students, aiming to cultivate future leaders in healthcare, education, research, and community

service. By investing in leadership development that is geared towards endowing the students with enhanced human skills, DUHS is ensuring their long-term success, growth, and ability to adapt to the evolving landscape of health sciences.

At DUHS, we are at the forefront of integrating emerging technologies to revolutionize education, research, and patient care. By adopting artificial intelligence (AI), digital learning platforms, and telemedicine, we are transforming the way healthcare professionals are trained, how research is conducted, and how patients receive care. These advancements enable us to deliver personalized learning experiences, conduct cutting-edge research with real-time data analysis, and offer remote medical consultations, ensuring high-quality healthcare reaches even the most underserved populations. Our commitment to leveraging these technologies is setting new benchmarks in healthcare and academic excellence, aligning DUHS with global standards in medical education and patient services.

It is important to underscore the fact that the collective efforts of every member of our University community have propelled us closer to our vision of excellence. In the Times Higher Education (THE) World University Rankings for 2024 in the Clinical and Health subject category, DUHS was ranked **as the #1 Health Sciences University in Pakistan**. This ranking reflects the University's performance across several indicators, including teaching, research, citations, international outlook, and extramural research funding.

However, our work does not stop here. As we step into the next phase of our Strategic Plan for 2024 to 2030, we must continue to build upon this foundation. Our vision, aptly described as "***Pioneering Excellence ♦ Inspiring Innovation***" calls for renewed commitment, creativity, and determination. I encourage each of you to remain engaged, to innovate, and to strive for excellence in every aspect of our mission.

Let us draw inspiration from our accomplishments and face the future with confidence and optimism. Together, we have the power to change lives, advance knowledge, and continue our legacy of excellence in healthcare. ***Let us continue to work together to transform challenges into opportunities and aspirations into achievements.***

Thank you for your unwavering dedication and commitment and I am confident that, united in purpose, we will achieve even greater success in the years to come.

TABLE OF CONTENTS

DESCRIPTION	PAGE No.
Vice Chancellor's Message	04
Executive Summary	07
Introduction and Overview	09
About the University	11
University's Role During COVID-19 Pandemic	16
Vice Chancellor's Seed Funding Initiative (VCSFI)	18
Emerging Leadership Academy	20
Section I: Overview of the Strategic Planning Process	21
Section II: Vision, Mission, and Values	24
Section III: Aspirational Institutions	27
Section IV: Strategic Goals	29
Section V: Measurable Outcomes	45
Section VI: Resource Planning to Achieve Strategic Goals	46
Section VII: Implementation and Monitoring of Strategic Plan	47
Section VIII: List of Appendices	48

EXECUTIVE SUMMARY

After successfully implementing the first phase of its Strategic Plan (2018 -2023), Dow University of Health Sciences (DUHS) is now embarking on an even bolder journey in the next phase of its forward-looking vision. Strategic Plan (2024-2030) outlines a comprehensive roadmap to drive transformation across its core missions of education, research, clinical care, and community engagement. This plan, titled “*Pioneering Excellence ♦ Inspiring Innovation*”, aims to solidify DUHS’s position as a leading academic institution in Pakistan and beyond, committed to innovation, excellence, and the highest standards of service.

DUHS envisions being a pre-eminent academic institution committed to changing and saving lives through outstanding student and patient-centered education, innovative research, and exceptional clinical care. The mission is to provide quality education, foster research, and deliver evidence-based clinical services informed by cutting-edge scientific advancements.

The plan is anchored around seven strategic goals that guide DUHS’s efforts:

- **Enhancing Education Quality:** To deliver student-centered, nationally, and globally competitive education across undergraduate and postgraduate programs that aligns with 21st-century healthcare needs.
- **Strengthening Research and Innovation:** To build research capacity and establish DUHS as a leader in generating and disseminating new knowledge in strategically important areas, enhancing both regional and global impact.
- **Delivering High-Quality Clinical Care:** To offer evidence-based, patient-centered clinical care of the highest quality, reinforcing DUHS’s role as a healthcare leader in the region.
- **Expanding Community Engagement:** To foster mutually beneficial relationships with local communities, addressing societal needs through education, research, and clinical service.
- **Workforce Development:** To recruit, retain, and train a quality workforce in strategic areas, ensuring a skilled and motivated team that supports DUHS’s mission.
- **Promoting Fiscal Sustainability:** To develop innovative projects that provide commercial value and enduring fiscal sustainability, enhancing DUHS’s ability to maintain and expand its core missions.

- **Ensuring Accountability and Transparency:** To cultivate an environment of administrative and fiscal responsibility, fostering a culture of accountability and continuous improvement across the University.

The strategic plan includes detailed action items, measurable outcomes, and resource planning to ensure that each goal is achieved. It emphasizes the integration of advanced technologies, the establishment of “signature” research areas, and the scaling of initiatives to broaden DUHS’s impact. An Office of Strategic Planning Implementation and Assessment will oversee the execution of this plan, ensuring that progress is continuously monitored and reported.

DUHS is committed to leading the transformation of healthcare education and clinical service in Pakistan. This strategic plan serves as a blueprint to guide DUHS towards its aspirations, fostering an environment where innovation thrives, and excellence in service and education is the norm. With a shared vision, dedicated resources, and an unwavering commitment to its mission, DUHS will continue to set the standard for health sciences education and research in the region.

INTRODUCTION AND OVERVIEW

The Dow University of Health Sciences (DUHS) stands at the forefront of healthcare education, research, and clinical excellence in Pakistan. Established in 2004, DUHS has rapidly evolved into a comprehensive health sciences institution, integrating a dynamic approach to education, pioneering research, and patient-centered clinical care. Our strategic plan 2024 – 2030 is framed around our goal of “***Pioneering Excellence ✦ Inspiring Innovation***” sets the stage for the next journey, charting a path toward transformative impact both regionally and globally.

This plan reflects our unwavering commitment to redefining health sciences education and research by embracing innovation, fostering community engagement, and nurturing the next generation of healthcare leaders. As the largest and most comprehensive health sciences institution in the region, DUHS is uniquely positioned to influence the future of healthcare through its multifaceted approach, blending academic rigor with clinical expertise.

This strategic plan aims to propel DUHS into a new era of growth and leadership, guided by a clear vision to be a pre-eminent academic institution committed to changing and saving lives. This document outlines our strategic goals, which focus on enhancing educational quality, expanding research capacity, delivering high-quality clinical care, and engaging meaningfully with our community.

Developed through a collaborative and participative process, the strategic plan involved extensive input from faculty, staff, students, and community stakeholders. Our approach was driven by a shared vision of excellence and a commitment to accountability and transparency. The plan’s framework was crafted to capitalize on DUHS’s strengths, address challenges, and seize opportunities in the rapidly evolving fields of healthcare and education.

The plan is structured around eight strategic goals, each designed to align with DUHS’s mission and values. From timely integration of emerging technologies, to enhancing research capabilities, implementing innovative clinical practices, and fostering a culture of continuous learning, each goal is supported by actionable strategies and measurable outcomes. Resource planning and ongoing evaluation will ensure that these goals are achieved, maintaining DUHS’s position as a leader in health sciences.

This strategic plan is more than a document; it is a call to action. It invites all members of the DUHS community to contribute to a shared mission of excellence, innovation, and service. As we move forward, our collective efforts will not only shape the future of DUHS but also redefine the landscape of healthcare in Pakistan.

ABOUT THE UNIVERSITY

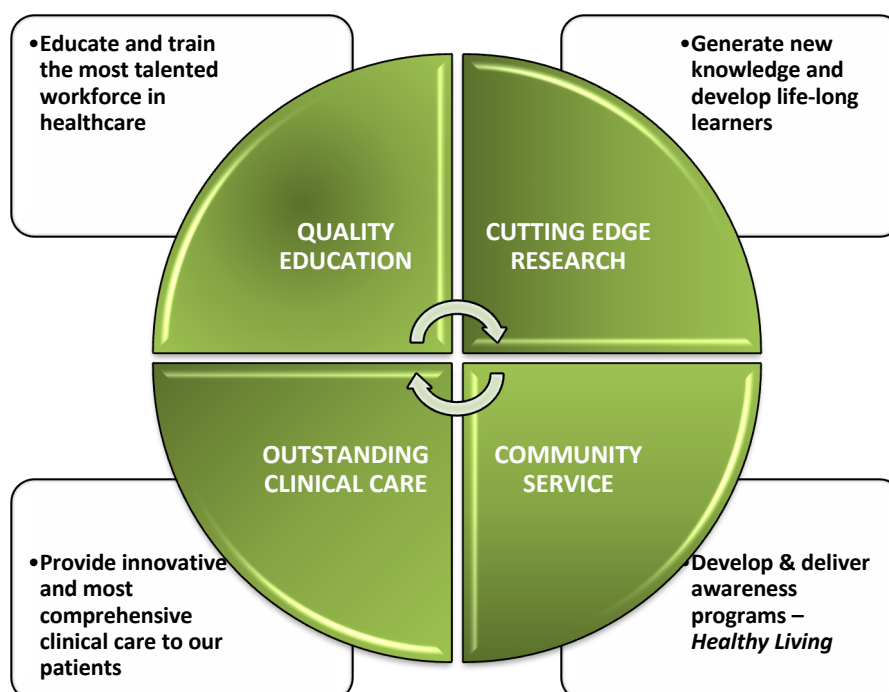


Founded by Sir Hugh Dow in 1945, Dow Medical College (DMC) initially offered only an M.B.B.S. degree under the University of Karachi. In 2004, the Legislature of Sindh established Dow University of Health Sciences (DUHS) through an Act (Amended in 2022), bringing together Dow Medical College, Sindh Medical

College, and the Ojha Institute of Chest Diseases as its constituent entities.

While DUHS may have a relatively short history as a University, its achievements are significant. Today, it boasts over 920 full-time faculty members and more than 2,600 staff, serving a diverse community of over 8,000 students across three campuses. DUHS continues to lead the way in education, research, and clinical care, shaping the future of healthcare in this region and beyond.

The four functional units of DUHS are as follows:



DUHS has 44 colleges/schools/institutes and other academic entities in two (2) campuses:

- **Dow Medical College (DMC) Campus:** This campus is situated on Mission Road in Saddar, Karachi. It is in the heart of the city, near Civil Hospital Karachi.
- **Ojha Campus:** This campus is located on Suparco Road, near the Karachi University Campus in Gulzar-e-Hijri, Scheme 33, Karachi. It hosts several institutes, including the Ojha Institute of Chest Diseases and Dow International Medical College.

Presently, the University has the following academic entities:

- **ACADEMIC ENTITIES:**

- **MEDICAL COLLEGES:**

- Dow Medical College
- Dow International Medical College

- **DENTAL COLLEGES:**

- Dow Dental College
- Dow International Dental College
- Dr. Ishrat-ul-Ebad Khan Institute of Oral Health Sciences

- **OTHERS HEALTH SCIENCES ENTITIES:**

- Dow College of Pharmacy
- School of Postgraduate Studies
- School of Public Health
- Dow College of Biotechnology
- Institute of Business and Health Management
- Dow Institute of Medical Technology
- Dow Institute of Health Professional Education
- Institute of Nursing & Midwifery

- **CLINICAL:**

- Dow University Hospital
 - National Institute of Diabetes & Endocrinology

- Dow Institute of Cardiology
- National Institute of Liver & G.I. Diseases
- Dow Institute of Liver & Kidney Transplantation
- Sindh Infectious Diseases Hospital & Research Center
- OJHA Institute of Chest Diseases
- Dr. Abdul Qadeer Khan Institute of Behavioral Sciences
- Dow International Dental College Hospital
- Dow Institute of Radiology
- Dow Diagnostic Research & Reference Laboratory
- Dow Institute of Physical Medicine & Rehabilitation
- Regional Blood Center
- Dr. Ishrat-ul-Ebad Khan Institute of Blood Diseases
- Dow Comprehensive Cancer Center
- Pharmacy

Additionally, at the present time, it has the following Deanships, which provide the leadership and oversight of critical areas in the University:

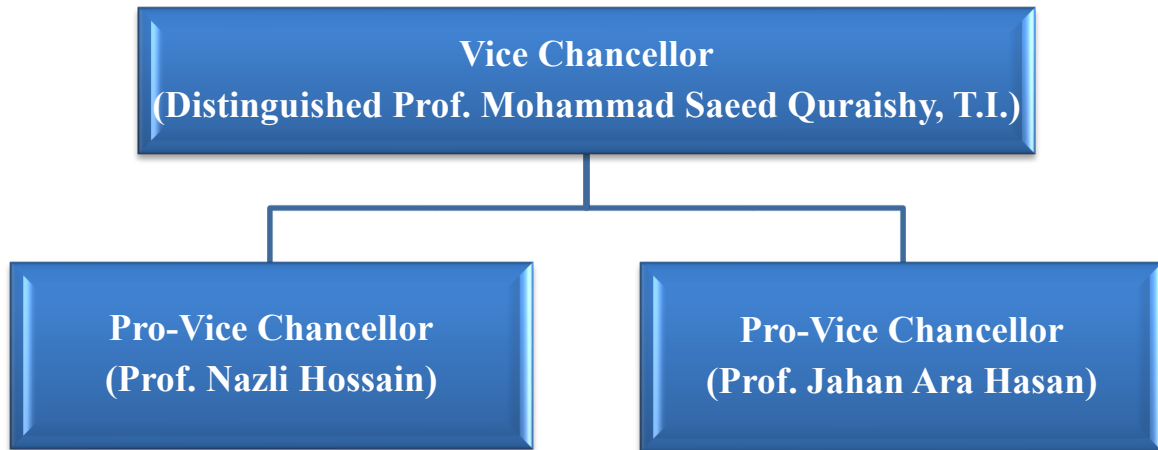
- Faculty of Medical Sciences
- Faculty of Dentistry
- Faculty of Allied Health Sciences
- Faculty of Pharmaceutical Sciences
- Faculty of Business Administration
- Faculty of Biomedical Engineering & Technology

• **OTHER NON-ACADEMIC & ADMINISTRATIVE ENTITIES:**

- Office of the Registrar
- Quality Enhancement Cell
- Dow Fly Research Lab and Stock Center
- Dow Research Institute of Biotechnology & Biomedical Sciences (DRIBBS)
- Dow Institute for Advanced Biological and Animal Research (DIABAR)
- Dow Institute of Biological, Biochemical, and Pharmaceutical Sciences (IBBPS)
- Dow Institute for Life Sciences (DILS)
- Dow University Business Incubation Center
- Directorate of Finance
- Office of Research, Innovation & Commercialization (ORIC)

- Dow Premium Health Water – *Riva Water*
- Directorate of Examination
- Directorate of Admissions
- Directorate of Information & Communication Technology
- Office of Procurement & Supply Chain
- Office of Strategic Development & Implementation (OSDI)
- Department of Biomedical Engineering
- Directorate of Internal Audit
- Department of Fire, Safety, & Security
- Department of Planning & Development
- Department of Works & Services
- Department of Alumni Affairs, Marketing, & Communication
- Department of Transportation
- Dow Libraries
- Q-Bank
- Directorate of Global Engagement
- Day Care Center
- Sports Complex
- Department of Public Relations
- Department of Legal Affairs
- Dow Office of Student Affairs
- Office of Resident Director

ORGANIZATIONAL STRUCTURE:



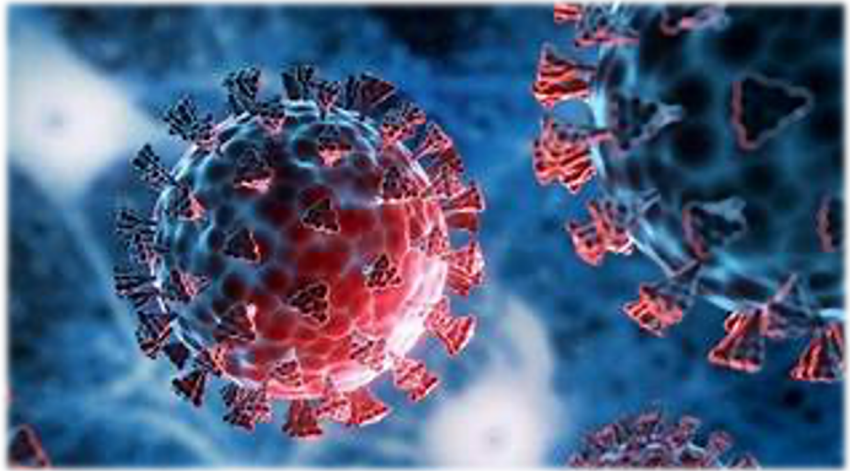
Developing and delivering quality education to students is at the heart of this University's mission. In this regards, the University has and will continue to seek accreditation/recognition of its colleges, schools and institutes and undergraduate and postgraduate programs from relevant national and international bodies. It currently has following accreditation/recognitions of its programs from various relevant agencies in Pakistan:

- Pakistan Medical & Dental Council
- Higher Education Commission
- College of Physician & Surgeons of Pakistan
- Pharmacy Council of Pakistan
- Pakistan Nursing & Midwifery Council
- Sindh Healthcare Commission
- National Business Education Accreditation Council
- Allied Health & Professional Council

As a premier public institution, the University is keen to get engaged in selected areas of research and scholarship that continues to enrich our education, inform our clinical care and is of value to the community. We envision that acquisition of new knowledge will enrich the educational experience of our students, allow us to recruit and retain quality faculty and continue to improve the quality of care that we provide to our patients.

UNIVERSITY'S ROLE DURING COVID-19 PANDEMIC

During the COVID-19 pandemic, Dow University of Health Sciences (DUHS) played a pivotal role in managing and responding to the crisis in several keyways. DUHS quickly set up one of the earliest COVID-19 testing facilities in Karachi, enhancing the city's capacity to diagnose and manage cases. The University's laboratories were equipped to conduct PCR tests, providing timely and accurate results to help control the spread of the virus. DUHS also established dedicated COVID-19 treatment wards and isolation units, particularly at the Ojha Campus, to care for patients with moderate to severe symptoms.



DUHS contributed significantly to COVID-19-related research, including studying the virus's epidemiology, developing potential treatment protocols, and exploring the long-term effects of the infection. The University's research teams worked on several studies that were shared with the broader medical community to help enhance understanding of the disease.

As vaccines became available, DUHS was at the forefront of the vaccination efforts in Karachi. The University set up multiple vaccination centers to administer vaccines to the public, healthcare workers, and high-risk groups. DUHS also conducted public awareness campaigns to encourage vaccination uptake and educate people about vaccine safety and efficacy.

To reduce the burden on hospitals and prevent virus transmission, DUHS launched telemedicine services, allowing patients to consult with healthcare professionals remotely. This service proved especially vital for those needing regular consultations or those with chronic illnesses who were hesitant to visit healthcare facilities during the peak of the pandemic.

DUHS continued to educate and train medical students and healthcare professionals, adapting its curriculum and training programs to the new realities posed

by the pandemic. The University swiftly adapted to remote learning by developing a comprehensive Learning Management System (LMS) and establishing Smart Classrooms. These initiatives enabled the University to deliver high-quality virtual education, ensuring uninterrupted learning for students. The LMS facilitated online lectures, interactive sessions, and assessments, while the Smart Classrooms were equipped with advanced technology to support a seamless virtual learning experience, bridging the gap between traditional and digital education.

DUHS took an active role in public awareness campaigns about COVID-19, its symptoms, preventive measures, and the importance of social distancing, wearing masks, and hand hygiene. The University collaborated with local and national health authorities to disseminate accurate information and counter misinformation about the virus and vaccines.

DUHS provided crucial support to healthcare workers, who were on the front lines of the pandemic. This included mental health support, training in infection control, and ensuring the availability of personal protective equipment (PPE). The University also conducted research on the mental health impact of the pandemic on healthcare workers and developed resources to help them cope with stress and burnout.

DUHS collaborated with national health authorities, international organizations, and research institutions to share knowledge, resources, and best practices. These partnerships enabled the University to stay updated on global developments and apply innovative solutions in their local context.

Overall, DUHS played a crucial role in managing the COVID-19 crisis by combining its strengths in medical education, research, clinical care, and community engagement to protect public health and support the healthcare system in Karachi and beyond.

VICE CHANCELLOR'S SEED FUNDING INITIATIVE

The Vice Chancellor's Seed Funding Initiative (VCSFI) at Dow University of Health Sciences (DUHS) was initiated in 2019 as part of University's strategic goal aimed at fostering a culture of research, innovation, and academic growth within the University. VCSFI was designed to provide financial support to faculty members, researchers, and students to pursue early-stage research projects. With over PKR 35 million awarded in the last four cycles of funding, VCSFI continues to enable them to explore innovative ideas and generate preliminary data, which can be essential for applying for larger grants from national or international funding agencies.

By providing seed funding, this initiative promotes a culture of creativity and innovation within the University. It encourages faculty and students to think outside the box, take calculated risks in their research endeavors, and develop new approaches to solving pressing healthcare challenges. VCSFI helps to continue to build research capacity at DUHS by providing the necessary resources and infrastructure to support new and ongoing research projects. This, in turn, strengthens the University's overall research profile and positions it as a leading institution in health sciences research and facilitates collaboration across different disciplines within DUHS. By supporting projects that involve multiple departments or faculties, VCSFI fosters interdisciplinary research, leading to more comprehensive and impactful studies.

The seed funding provided by VSCFI allows researchers to produce preliminary results, which are often required when applying for competitive external grants. This initial support can make DUHS researchers more competitive in securing larger funding from external sources such as government agencies, non-profit organizations, and international bodies. The initiative is particularly valuable for early-career researchers and junior faculty members who may lack the funding needed to start their research programs. By providing them with the resources to launch their projects, VCSFI helps with their professional development and establishes their research credentials.

This initiative aligns with DUHS's strategic goals of enhancing research capacity, generating new knowledge, and fostering innovation. It helps the University achieve its vision of being a leading academic institution that contributes significantly to healthcare research and development. Projects funded through this initiative often address local and regional health challenges, thereby fostering engagement with the community and potentially leading to public health improvements. It enables researchers to tackle relevant health issues, propose evidence-based solutions, and make meaningful contributions to society.

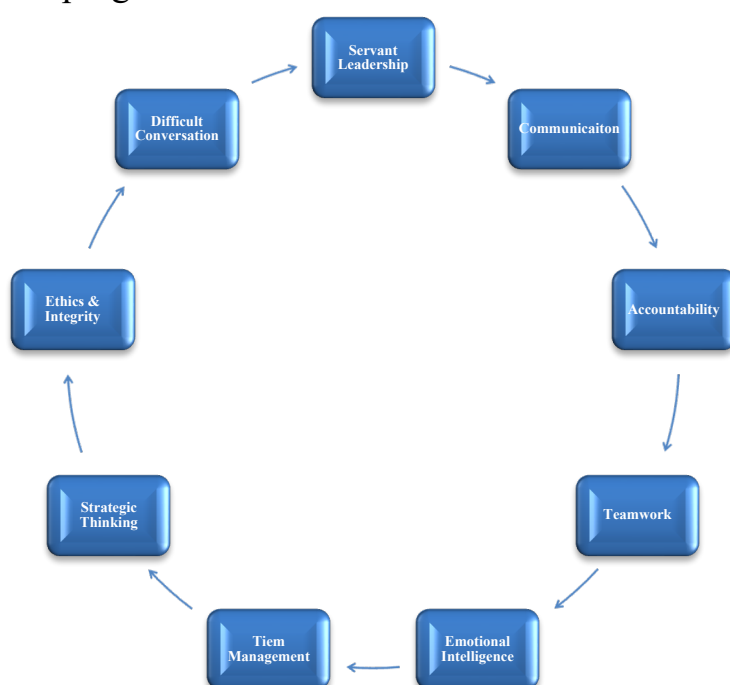
VCSFI at DUHS is a critical tool for promoting research excellence, encouraging innovation, and supporting the academic and professional growth of faculty and students. By providing the initial financial resources needed to pursue new ideas, the initiative helps to establish DUHS as a hub of cutting-edge health sciences research and innovation.

EMERGING LEADERSHIP ACADEMY

The Emerging Leadership Academy (ELA) at Dow University of Health Sciences (DUHS) was established in September 2023 with the burgeoning need for nurturing future leaders; addressing organizational and societal challenges; and promoting the core values of servant leadership. One of the program that ELA has offered to students is entitled: “Mastering the Art of Effective Leadership”. The primary objective of this **novel** program is to provide a comprehensive foundation for students to become effective leaders and to continue to enhance their human skills to be successful in their personal and professional lives.

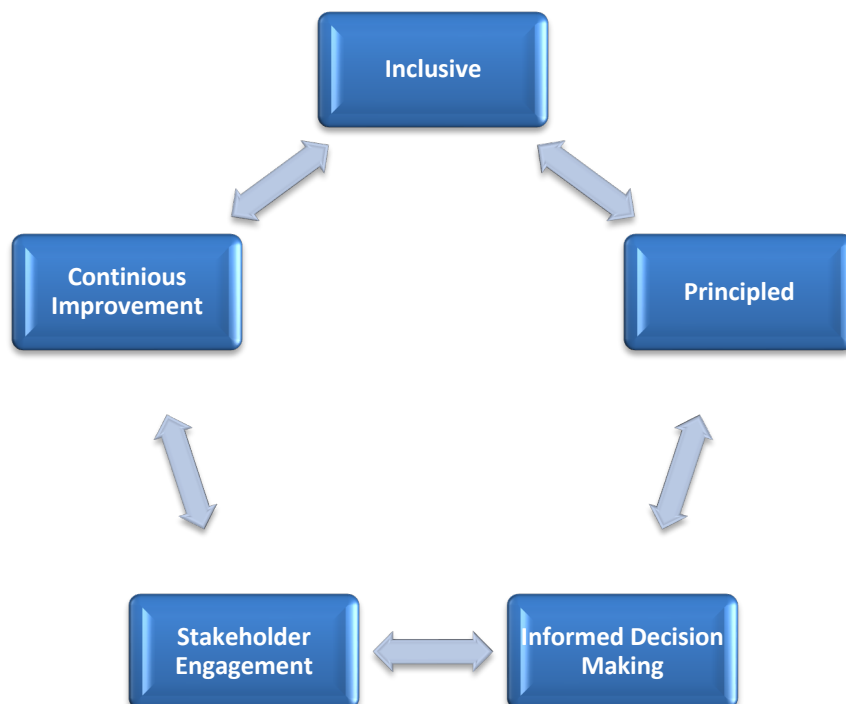
While there are many different styles of leadership, ELA elected to embrace and propagate the fundamental values of Servant Leadership as enunciated by Robert Greenleaf in an essay published in 1970 entitled “The Servant as Leader”. A servant leader shares power, puts the needs of the people first, and helps people develop and perform as highly as possible. Instead of the people working to serve the leader, the leader exists to serve the people. Some of the key principles and characteristics of a servant leader are articulated below:

By addressing these areas, an Emerging Leadership Academy is destined to play a pivotal role in shaping the leaders of tomorrow, ensuring they are well-equipped to handle the complexities of the future. Some of the topics covered in this three-month long certification program are:



SECTION I: OVERVIEW OF THE STRATEGIC PLANNING PROCESS

The strategic planning process at Dow University of Health Sciences (DUHS) was an intensive, collaborative effort aimed at defining a clear, actionable roadmap for the future. Recognizing its role as a leading academic and clinical institution, DUHS embarked on this process to realign its vision, enhance its core missions, and respond to the evolving needs of healthcare education, research, and patient care. The entire process was guided by five (5) elements:



The development of this strategic plan was rooted in inclusivity and broad-based engagement. The Executive Strategic Planning Workgroup, comprised of senior leadership, faculty, & staff guided the process. This diverse group brought together a wealth of expertise, perspectives, and insights, ensuring that the plan reflects the shared aspirations and values of the entire DUHS community.

The planning process was anchored by key guiding principles that emphasized collaboration, accountability, and innovation. The plan was crafted to be aspirational yet realistic, aiming for high standards while being grounded in achievable goals.

Strategic thrusts were designed to foster creativity, encourage multidisciplinary collaboration, and ensure alignment with DUHS’s mission and vision.

To ensure the strategic plan was both comprehensive and forward-looking, the planning process incorporated extensive data analysis, benchmarking against aspirational institutions, and thorough environmental scanning. This data-driven approach allowed DUHS to identify key opportunities and challenges, set priorities, and allocate resources effectively to maximize impact.

Stakeholder engagement was a critical component, with multiple rounds of consultations, feedback sessions, and workshops conducted throughout the planning process. This iterative approach not only enriched the plan but also fostered a sense of ownership among stakeholders, ensuring that the strategic goals and actions are fully embraced by the DUHS community.

This strategic plan is designed to be dynamic and adaptable, with built-in mechanisms for continuous assessment, feedback, and refinement. An independent Office of Strategic Development & Implementation will oversee the execution of the plan, monitoring progress through key performance indicators and adjusting strategies as necessary to stay on course.

The robust and participative nature of the strategic planning process ensures that DUHS is well-equipped to navigate the complexities of the healthcare and academic landscapes. By building on its strengths, addressing challenges proactively, and fostering a culture of excellence and innovation, DUHS is poised to achieve its strategic vision and continue its legacy of leadership in health sciences.

Membership of the Executive Strategic Planning Workgroup:

- | | |
|---|-------------|
| • Professor Mohammed Saeed Quraishy
Vice Chancellor, DUHS | Chairman |
| • Professor Sohail Rao
Chief Scientific Advisor to the Vice Chancellor, DUHS | Co-Chairman |
| • Professor Nazli Hossain
Pro-Vice Chancellor, DUHS | Member |
| • Professor Jahan Ara Hasan
Pro-Vice Chancellor, DUHS | Member |

- Professor Imtiaz Ahmed
Dean, Faculty of Dentistry, DUHS Member
- Professor Sumbul Shamim
Principal, Dow College of Pharmacy Member
- Professor Saba Sohail
Principal, Dow Medical College Member
- Professor Sajida Qureshi
Principal, School of Postgraduate Studies, DUHS Member
- Professor Asima Faisal
Director, Institute of Business & Health Management, DUHS Member
- Professor Yahya Noori
Director, Student Digital Center, DUHS Member
- Professor Kashif Shafiq
Principal, School of Public Health, DUHS Member
- Prof. Sonia Siddiqui
Vice Principal, School of Postgraduate Studies, DUHS Member
- Ms. Sanam Soomro
Director, Quality Enhance Cell, DUHS Member
- Mr. Hamid Ali Shah
Additional Director, Finance, DUHS Member
- Mr. Syed Farhan Mahmood
Director, Human Resources, DUHS Member
- Mr. Muhammad Babar
Director, Office of Strategic Development & Implementation, DUHS Member/
Secretary

SECTION II: VISION, MISSION, AND VALUES

One of the principal objectives of the strategic planning process was the articulation and communication of the fundamental purpose of the University. It is the construct within which challenges and opportunities are examined and analyzed, strategic issues framed, and strategic goals and thrusts articulated. It is also the process through which the plan is implemented and the lens which ultimately evaluates its effectiveness. The primary components of the University's purpose are its vision, mission, and values.

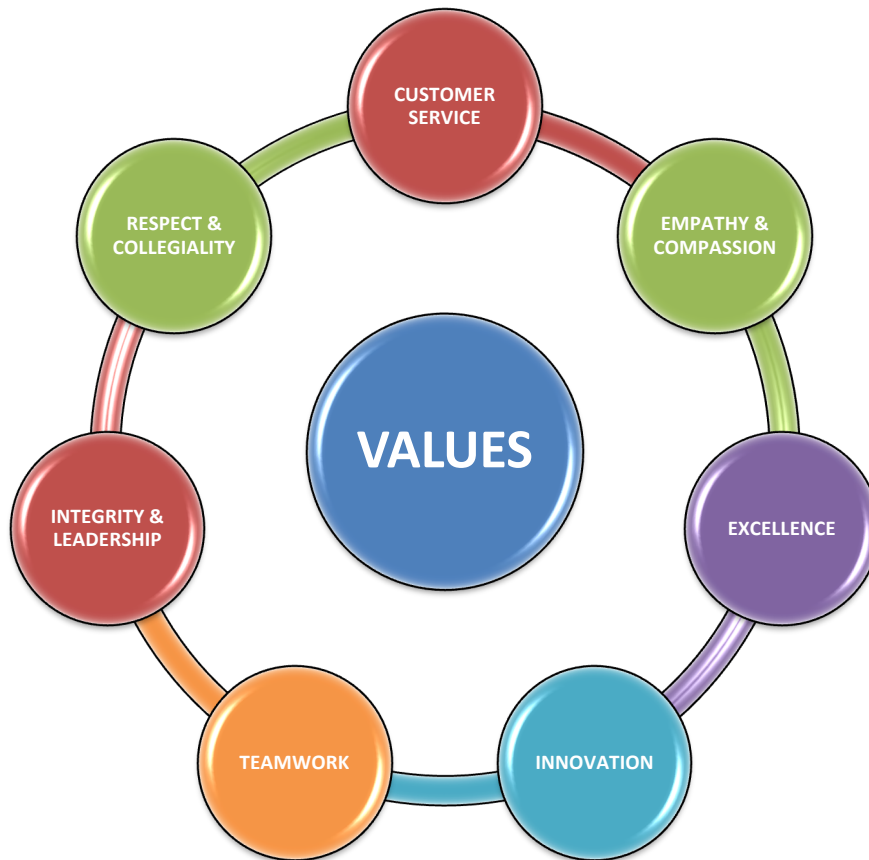
VISION

**To be a pre-eminent academic institution committed to
changing and saving lives**

MISSION

**Providing outstanding patient-centered education,
training and clinical care informed by cutting-edge
research and innovation generating and disseminating
new knowledge**

VALUES



- **CUSTOMER SERVICE**
 - Put patients & students first
- **EMPATHY & COMPASSION**
 - Understand before you judge
 - Be concerned for sufferings & misfortunes of others
- **EXCELLENCE**
 - Be the best and commit to exceptional quality and service
- **INNOVATION**
 - Encourage curiosity, imagine, create and share

- **TEAMWORK**
 - Engage & collaborate

- **INTEGRITY & LEADERSHIP**
 - Be a role model and influence others to achieve their best
 - Have the courage to do the right thing
 - Hold yourself and others accountable

- **RESPECT & COLLEGIABILITY**
 - Be kind
 - Listen to understand
 - Value different opinions

SECTION III: ASPIRATIONAL INSTITUTIONS

To elevate its standing and drive continuous improvement, Dow University of Health Sciences (DUHS) has identified a set of aspirational peer institutions that serve as benchmarks for excellence. These institutions exemplify the highest standards in education, research, clinical care, and community engagement. By aligning with these leading universities, DUHS aims to set ambitious targets, inspire innovation, and measure its progress against globally recognized standards.

DUHS's selection of aspirational institutions was guided by a comprehensive evaluation of their achievements, impact, and alignment with our mission and values. These peers are recognized for their excellence in health sciences education, pioneering research, and transformative clinical practices. The process involved rigorous analysis of performance metrics, academic rankings, research output, and the quality of patient care, allowing DUHS to identify the best practices that can be adapted and implemented.

The aspirational peers serve as models of what DUHS seeks to achieve in the coming decade. They provide a clear benchmark for the standards of education, research capacity, and clinical quality that DUHS aims to attain. This benchmarking process is not just about comparison; it is a strategic tool that guides DUHS's decision-making, highlights areas for improvement, and drives the pursuit of innovative approaches.

Among the selected peers are institutions renowned for their contributions to healthcare and academia:

- **The Aga Khan University, Karachi:** Known for its excellence in healthcare education and its commitment to community service, this institution sets a high standard in both academic rigor and clinical practice.
- **National University of Sciences and Technology (NUST), Islamabad:** Recognized globally for its research innovation and multidisciplinary approach, NUST serves as a benchmark in integrating advanced technologies into healthcare education.
- **Quaid-e-Azam University, Islamabad:** A leader in research output and academic excellence, providing insights into fostering a strong research culture within a public University setting.
- **COMSATS University, Islamabad:** Noted for its focus on cutting-edge research and international collaborations, this institution exemplifies the strategic development of research capacity.

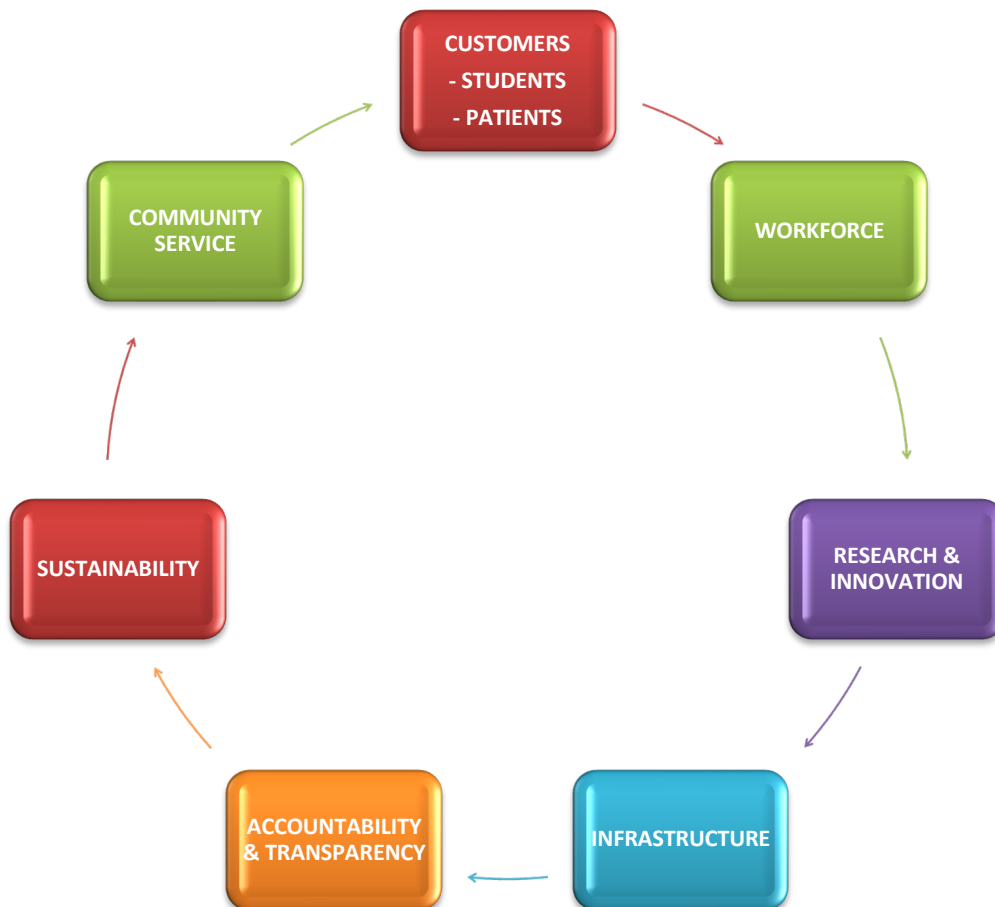
- **King Abdulaziz University, Jeddah:** A top-ranking University known for its extensive healthcare programs, innovative research, and successful international partnerships.

DUHS's engagement with these aspirational institutions is a commitment to continuous learning and adaptation. By regularly assessing our progress against these benchmarks, we aim to identify opportunities for strategic partnerships, enhance our educational and research capabilities, and implement best practices in clinical care.

The aspiration to match and eventually surpass these institutions is a driving force behind DUHS's strategic initiatives. This process challenges us to not only meet international standards but also to define new ones. Through this strategic alignment, DUHS will continue to evolve, striving to be a leader in health sciences education, research, and clinical excellence in the region and beyond

SECTION IV: STRATEGIC GOALS

Dow University of Health Sciences aspires to gain pre-eminence in education, selected areas of research and innovation and world-class clinical care with local, regional, and global impact. To accomplish these objectives and to use our available resources in the most judicious manner, we have identified the following strategic areas of emphasis for the next decade:



This comprehensive and expansive vision will be accomplished by the following goals:

- Goal I:** Impart quality undergraduate and postgraduate education that is student-centered, nationally, and globally competitive and relevant to the delivery of 21st century healthcare
- Goal II:** Enhance capacity for research, innovation, and dissemination of new knowledge in areas of strategic interest for the region

- Goal III:** Offer evidence-based patient-centered clinical care of the highest quality
- Goal IV:** Expand and sustain a mutually productive engagement with the local community
- Goal V:** Recruit, retain, educate, and train quality workforce in strategic areas of need
- Goal VI:** Strategic development of innovative projects and programs that are of commercial importance and provide enduring fiscal sustainability
- Goal VII:** Develop and sustain an environment of administrative and fiscal responsibility, accountability, and transparency
- Goal VIII:** Integrate Emerging Technologies (AI, AGI, Machine Learning) to Revolutionize Education, Research, and Patient Care at Dow University of Health Sciences (DUHS) by 2027

Strategic Goal I: Impart quality undergraduate and postgraduate education that is student-centered, nationally, and globally competitive and relevant to the delivery of 21st century healthcare

The quality and reputation of a University's academic programs are among its most valuable assets. However, maintaining this excellence requires continuous attention and effective management. Without this, even the strongest institutions risk facing significant challenges that could impact their students' futures.

At DUHS, we are dedicated to upholding the highest standards of education. To achieve this, we will implement strategic plans across all levels—faculties, colleges, schools, institutes, and administrative units. Our goal is to provide a transformative and relevant educational experience that prepares our students to excel in their careers and contribute meaningfully to society. To satisfy these requirements, the University will:

A: UNDERGRADUATE EDUCATION & TRAINING:

- Continue to modify existing curriculum to impart 21st century education and training to students in various disciplines;
- Implement evidence-based methodology for educating and teaching students and ensure that the faculty is adequately trained;
- **Develop and implement courses to familiarize students with the rapid advances in technology such as artificial general intelligence, deep learning, quantum computing, machine learning, augmented and virtual reality, etc.;**
- Provide opportunities for students in various disciplines to engage in research and scholarship and facilitate generation of new knowledge – cultivate *LIFE-LONG LEARNERS*;
- Facilitate measured integration of various disciplines to enhance multidisciplinary education and training of students;
- **Implement HEC’s mandate of inclusion of general education requirements for undergraduate programs to ensure a well-rounded education. These requirements aim to provide a broad-based education foundation, critical thinking, and effective communication skills. These include:**
 - **Compulsory Courses: English Language, Islamic Studies, or Ethics (for non-Muslim students), and Pakistan Studies;**
 - **Social Sciences and Humanities: Courses in history, philosophy, sociology, psychology, and arts;**

- **Natural Sciences and Mathematics: Basic courses in subjects like biology, chemistry, physics, and mathematics;**
- **Information Technology and Communication Skills: Courses aimed at enhancing digital literacy and communication abilities.**
- Develop testing capabilities that truly measure students core knowledge of their relevant discipline;
- Gradually and systematically obtain/sustain accreditation of various academic programs from discipline-specific national and international organizations;
- Create and support globally competitive, market-relevant, and distinctive academic programs and faculties that address the changing regional and national needs;
- Provide increased access to quality higher education for selected undergraduate students who demonstrate the aptitude to succeed;
- Enhance and expand the talent pool by shaping the enrollment profile of University's student body to reflect that found at our aspirational peer institutions;
- **Encourage students to get engaged in the leadership development programs offered by the newly established Emerging Leadership Academy;**
- Mandate delivery of instruction in English to develop and sustain a globally competitive environment;
- Introduce courses on the philosophy and science of ethics and morality in all programs;
- Continue to explore and expand new and innovative alternative modes of delivery of curriculum using electronic platforms such as eCollege, Blackboard, Pod Casting, etc.;
- Create and support student exchange programs with national and international accredited universities;
- Ensure that international students are exposed to and prepared for shelf exams ensuring their successful integration in their country of origin;
- Recruit and retain world-class faculty who are engaged in innovative approaches to education and training that integrates interdisciplinary research and scholarship;
- Benchmark performance of various academic programs against our aspirational institutions;
- Continue to provide opportunities for our junior faculty to obtain postgraduate education and training in selected areas of University's interest;

- **Establish an expansive examination facility to accommodate >2,000 students;**
- **Develop and maintain a student-friendly and robust web interface.**

B: POSTGRADUATE EDUCATION & TRAINING:

In addition to those outlined above [Section 5, Goal I (A)], specific action items related to postgraduate education and training are delineated below:

- Create optimal infrastructure for oversight of programs that meets HEC, PMDC, CPSP and international standards;
- **Review all existing programs and evaluate their value/relevance to University's Strategic Plan 2030;**
- Identify/recruit faculty with required education and training to serve as supervisors and co-supervisors;
- **Successfully implement the DUHS-recognized PhD Supervisor program and encourage qualified faculty to obtain this certification;**
- Streamline the process for submission/approval of thesis/synopsis and for obtainment of IRB approvals for clinical studies;
- **Create scholarship programs to recruit and retain meritorious students;**
- Continue to offer competitive intramural research funding opportunities – *VICE CHANCELLORS' SEED FUNDING INITIATIVE*;
- Ensure that students complete their program within designated period of study;
- Implement HEC rules and regulations regarding the number of masters and doctoral students supervised by various supervisors;
- Develop national and international collaborations and encourage and support students to avail of these opportunities;
- **Sustain existing and continue to explore the establishment of new joint degree programs with reputable national and international institutions of higher education;**

Strategic Goal II: Enhance capacity for research, innovation, and dissemination of new knowledge in areas of strategic interest for the region

The University is committed to providing quality education and training as its primary objective. To further this goal, we aim to enhance the learning experience for our students by recruiting and retaining top-tier faculty and staff. Additionally, we will prioritize research and innovation in strategic areas that align with our mission.

Our aspiration is to lead in the generation and dissemination of new knowledge within the region, serving as a role model and inspiration for other institutions in Pakistan. Through these efforts, we will continue to elevate our academic standards and impact the broader community.

To accomplish these goals and to continue to enhance interdisciplinary research and scholarship the University and its individual academic units will:

- **Establish a School of Health Innovation & Emerging Technologies;**
- Continue to provide adequate support for enhancement of programs in the “SIGNATURE” areas of excellence in research (see Appendix A);
- Create optimal infrastructure to minimize redundancies, encourage collaboration and facilitate research, innovation, and commercialization across disciplines;
- **Reconstitute IRB and its processes to meet the standards outlined by the Association for the Accreditation of Human Research Protection Programs (AAHRPP);**
- Support and sustain the activities and areas of oversight of the Doctoral Admission Committee;
- Minimize assignment of talented faculty to undertake administrative responsibilities;
- Continue to identify and recruit foreign educated and trained faculty in targeted areas of research;
- Create and support faculty exchange program with national and international universities;
- Continue to encourage interdisciplinary research through competitive intramural funding of outstanding research proposals – *VICE CHANCELLORS’ SEED FUNDING INITIATIVE*;

- Encourage obtainment of competitive and collaborative extramural grants and contracts from national and international funding agencies;
- Encourage and support faculty and students to attend and present at national, regional, and international meetings;
- Establish mutually productive affiliations with national and international pharmaceutical and device manufacturers to initiate translational and clinical research;
- Develop and deliver educational programs/workshops to enhance the knowledge and skills of faculty, staff and students involved in research and scholarship;
- **Develop and deliver mentorship training program for faculty:**
- Continue to expand the offerings in the electronic and print library facilities with access to latest scientific journals and publications;
- **Facilitate the establishment of “endowed” chairs in the areas of Signature research programs;**
- Continue to improve the quality and impact factor of the Journal of DUHS;
- Continue to further develop Smart Labs as core research facilities both for DUHS faculty and students as well as for external partners and collaborators;
- Continue to encourage public-private partnership to fully endow the Dow University Business Incubation Center;
- Continue to establish new and enhance the activities of existing research infrastructure such as Dow Institute for Advanced Biological and Animal Research; Dow Research Institute of Biotechnology & Biomedical Sciences; Office of Research, Innovation, and Commercialization, etc.
- **Develop and maintain a faculty-friendly and robust web interface.**

Strategic Goal III: Offer evidence-based patient-centered clinical care of the highest quality

As the largest healthcare system in the country, DUHS is committed to actively contributing to the creation of healthy, sustainable communities. One of our foremost strategic goals is to build on our strengths across all healthcare disciplines while gaining national and international recognition for excellence in specialized "niche" areas. Our aim is to provide world-class clinical care complemented by outstanding research and educational opportunities.

To continue advancing this goal, achieve clinical excellence, and meet the evolving healthcare needs of our communities, the clinical units and the University will:

- Ascribe to the six (6) pillars of clinical governance framework;
- **Continue to explore the possibility to create an integrated interdisciplinary tertiary care health system – Dow University Health System;**
- **Continue to practice evidence-based medicine;**
- Continue to improve the quality and access to clinical care provided by various facilities/service lines;
- Minimize human error by developing and implementing Standard Operating Procedures that meets international guidelines;
- Support and align with Pakistan’s National Health Vision 2025 (http://www.nationalplanningcycles.org/sites/default/files/planning_cycle_repository/pakistan/national_health_vision_2016-25_30-08-2016.pdf);
- Recruit, retain and encourage advanced education and training of qualified clinical faculty and staff;
- Continue to expand the services of the Trauma Center @ Dow University Hospital;

Clinical Governance Framework



CPD: CLINICAL PROFESSIONAL DEVELOPMENT

- **Establish Dow Comprehensive Cancer Center with Linear Accelerator and other advanced technology;**
- **Implement HCAHPS (Hospital Consumer Assessment of Healthcare Providers & Systems) across all facilities/service lines offering clinical care;**
- Develop clinical affiliation with national and international Joint Commission accredited health care facilities to embrace best practices and to provide evidence-based patient-centered clinical care;
- **Successfully obtain national and international accreditation of various facilities and service lines;**
- Continue to create new and improve existing postgraduate training programs in various clinical disciplines;
- Upgrade existing and develop new facilities for optimal delivery of clinical care;
- Ensure that the University continues to provide low-cost clinical care to the poor and the underserved population;
- **Develop and maintain a patient-friendly and robust web interface;**
- **Establish a department of Population Health – *be a leader in improving the health of the community that the University serves;***
- **Identify and minimize social determinants of health that have an overall negative impact;**
- **Create an Office of Quality and Safety to provide oversight across the entire clinical enterprise of the University;**
- **Create an integrated Department of Infection Prevention & Control that serves the entire clinical enterprise of the University;**
- Continue to improve financial outlook for individual facilities as well as the integrated health system;
- **Transition the culture from volume-based to value-based clinical services;**
- **Develop real-time performance metrics for various clinical services and review them in Weekly/Monthly Operating Rounds.**

Strategic Goal IV: Expand and sustain a mutually productive engagement with the local community

DUHS is deeply committed to the welfare and well-being of the communities it serves. The University recognizes this commitment as a vital strategic goal, reflecting its fundamental public mission to address societal needs through education, research, scholarship, and service. To fulfill this mission, DUHS and its academic, clinical, and administrative units will:

- **Enhance Community Engagement:**
 - Actively collaborate with local, regional, and national organizations to identify and address community health needs, ensuring our initiatives are aligned with public health priorities;
- **Advance Public Health Education:**
 - Develop and deliver accessible educational programs that empower communities with the knowledge and skills needed to prevent illness, promote wellness, and manage health conditions effectively;
- **Promote Research with Real-World Impact:**
 - Focus on research that directly benefits society, emphasizing studies that address pressing health challenges, reduce health disparities, and improve health outcomes for underserved populations;
- **Expand Clinical Services:**
 - Provide high-quality, patient-centered care through our clinical units, extending our reach to underserved areas and ensuring that all members of our community have access to essential healthcare services;
- **Cultivate Partnerships for Greater Impact:**
 - Establish and strengthen partnerships with governmental agencies, non-profit organizations, and private sector entities to enhance our capacity to serve and improve community health;
- **Lead by Example in Public Service:**
 - Encourage faculty, staff, and students to actively participate in community service initiatives, fostering a culture of volunteerism, empathy, and civic responsibility.

- **Implementing US Sustainable Development Goals:**

- DUHS is committed to the implementing the United Nations Sustainable Development Goals (UN SDGs) which are a collection of 17 interlinked global goals designed to achieve a better and more sustainable future for all by 2030. Adopted by DUHS and by all UN Member States in 2015, the SDGs address a wide range of global challenges, including poverty, inequality, climate change, environmental degradation, peace, and justice. Each goal has specific targets and indicators to measure progress, aiming to promote prosperity while protecting the planet. The SDGs emphasize inclusive development, ensuring that no one is left behind in the pursuit of sustainable growth and well-being



By integrating these actions into our daily operations and long-term planning, DUHS will continue to fulfill its mission of serving as a trusted partner in advancing the health and well-being of the communities we serve.

Strategic Goal V: Recruit, retain, educate, and train quality workforce in strategic areas of need

The most important asset of a University is its faculty and staff who serve the vision and mission of the institution. As such, all efforts should be expended to:

- **Establish an employee-friendly Office of Human Resources;**
- Streamline recruitment and reassignment process for faculty and staff;
- **Continue to implement strategies to enhance employee job satisfaction;**



- Enhance education and training of selected faculty and staff – *make professional development a centerpiece of University’s workforce strategy;*
- Identify, recruit, and retain qualified faculty and staff in strategic areas of need;
- Develop meaningful job descriptions for academic, clinical, and administrative positions and communicate them to respective employees:
- **Conduct fair annual performance evaluation with accountability and transparency;**
- Create an incentive plan for faculty and staff who exceed performance expectations;
- To the extent possible, minimize recruitment of faculty and staff using third-party contractors;
- **Ensure that MERIT is the only factor used in the recruitment and/or retention of quality faculty and staff;**
- Conduct evaluations across the board for staffing needs and knowledge, experience and suitability of the existing staff assigned to various academic, clinical, and administrative units

Strategic Goal VI: Strategic development of innovative projects and programs that are of commercial importance and provide enduring fiscal sustainability

Developing and maintaining facilities for teaching, training, and clinical care is a significant financial challenge for any higher education institution. This challenge is even greater for research-intensive institutions like DUHS, which must continually invest to ensure long-term viability and productivity. With relatively low tuition fees and affordable clinical care, it is critical for DUHS to sustain its core mission financially.

To achieve this, the University must strategically engage in projects and programs that offer a positive financial return on investment, ensuring sustainability and growth within the academic world. To accomplish this strategic goal, DUHS is committed to:

- Identifying and prioritizing high-impact initiatives that generate financial returns;
- Building partnerships with industry, government, and other stakeholders to secure funding and support;
- Leveraging existing resources efficiently while exploring new revenue streams to support growth.

By focusing on these strategies, DUHS aims to maintain its commitment to excellence in education, research, and clinical care while ensuring financial stability and continued advancement.

Strategic Goal VII: Develop and sustain an environment of administrative and fiscal responsibility, accountability, and transparency

As a rapidly expanding institution, DUHS is committed to building a sustainable and accountable academic, administrative, and financial infrastructure that supports its vision and mission. Universities not only serve as centers of knowledge but also as role models for the community by optimizing efficiency in administrative, fiscal, human resources, and other essential services. To achieve these objectives, DUHS is dedicated to:

- **Cultivating a Culture of Accountability:**
 - Establish a service-oriented culture with clear outcomes and accountability measures.

- **Streamlining Administrative Processes:**
 - Simplify administrative procedures to meet the needs of faculty, staff, and students effectively.

- **Ensuring Competent Staffing:**
 - Maintain that all administrative, financial, and service units are staffed by knowledgeable and experienced professionals.

- **Creating a Center for Staff Development:**
 - Regularly offer training on customer service, career development, professionalism, conflict of interest, nepotism, interpersonal skills, and more.

- **Implementing Orientation Programs:**
 - Provide comprehensive orientation for new faculty and staff to familiarize them with the institution, its academic, clinical, and administrative units, and performance expectations.

- **Optimizing Operational Efficiency:**
 - Develop efficient processes and infrastructure within various service areas, including Human Resources, Finance, Capital Development, Facilities, Procurement, Information Technology, Student Admissions, and Examinations.

- **Budgeting for Strategic Goals:**
 - Create a University-wide and departmental budget that supports the timely achievement of strategic objectives.
- **Ensuring Financial Transparency:**
 - Employ an internal auditor and an independent external auditor to monitor the use of resources, minimize waste, and prevent misuse.
- **Implementing Innovative Digital Platforms:**
 - Develop effective, user-friendly electronic platforms for delivering administrative and financial services promptly.
- **Enhancing Brand Awareness:**
 - Improve marketing efforts by engaging a private sector expert to elevate brand visibility and recognition.
- **Redesigning the DUHS Website:**
 - Update the University website to meet industry standards, making it more informative and user-friendly.
- **Adopting Business Intelligence Tools:**
 - Utilize advanced tools to handle complex administrative and financial tasks and to generate predictive models.
- **Strong Alumni Relations:**
 - DUHS is committed to managing alumni relationships which involves maintaining a strong, ongoing connection with former students to foster a sense of belonging and community. By cultivating a supportive and engaged alumni network, DUHS is committed to build a robust base of advocates, donors, and ambassadors who will continue to contribute to the University's growth, reputation, and future success.

Strategic Goal VIII: Integrate Emerging Technologies (AI, AGI, Machine Learning) to Revolutionize Education, Research, and Patient Care at Dow University of Health Sciences (DUHS) by 2027.

As the healthcare landscape continues to evolve, DUHS recognizes the transformative potential of emerging technologies such as Artificial Intelligence (AI), Artificial General Intelligence (AGI), and Machine Learning to revolutionize education, research, and patient care. In an era where technological advancements are reshaping industries, DUHS aims to position itself at the forefront of healthcare innovation. By integrating these cutting-edge technologies, DUHS seeks to enhance its academic programs, research capabilities, and clinical care offerings, ensuring the institution remains competitive and continues to excel in its core mission.

To achieve this, DUHS is committed to:

- **Enhancing Healthcare Education:** Integrate AI-driven personalized learning systems and virtual simulations to improve the quality of medical, dental, and allied health education.
- **Advancing Research Innovation:** Apply AI and Machine Learning to accelerate data analysis, predictive modeling, and personalized treatment solutions, positioning DUHS as a leader in healthcare research.
- **Transforming Patient Care:** Implement AI and AGI technologies to enhance clinical decision-making, diagnostics, and patient management, improving patient outcomes and reducing readmission rates.
- **Building Faculty and Student Expertise:** Equip faculty and students with the necessary knowledge and skills to apply AI, AGI, and machine learning technologies in their respective fields.
- **Establishing the College of Healthcare Innovation and Emerging Technologies:** Create a dedicated center to advance healthcare education, research, and clinical practice through the integration of emerging technologies.

By focusing on these strategies, DUHS aims to leverage the power of AI, AGI, and machine learning to enhance its educational offerings, drive research innovation, and improve patient care, solidifying its reputation as a global leader in healthcare technology.

SECTION V: MEASURABLE OUTCOMES

The success of this Strategic Plan relies on a high level of discipline, accountability, transparency, and professionalism from all members of the DUHS community—leadership, faculty, staff, and students alike. Achieving these goals requires a strong commitment to timely and effective implementation.

By 2030, with the successful execution of this Strategic Plan, DUHS aims to achieve the following milestones:

- Rank among the Top Tier higher education institutions in Pakistan, as determined by the Pakistan Higher Education Commission;
- Be recognized as the top Medical University in Pakistan, based on criteria from the Pakistan Higher Education Commission;
- Secure a position among the top 500 universities in The Times Higher Education (THE) World University Rankings
- Publish over 1,000 manuscripts per year in high-impact international journals.
- Attract over PKR 70 million annually in external funding.
- Achieve over 90% student and employee satisfaction rates.
- Conduct more than 20 sustainable and impactful community outreach projects each year.
- Rank among the top 400 universities in the UI Green Metric World University Rankings for sustainability.
- Surpass the benchmarks set by Pakistan’s National Health Vision 2025.

Key Performance Indicators (KPIs) will be developed to track these measurable outcomes and will be regularly shared with the University community.

SECTION VI: RESOURCE PLANNING FOR ACHIEVING STRATEGIC GOALS

For University to succeed in the future, we must have a clear vision of excellence and the necessary resources—human, financial, physical, and technological—to achieve their goals. Therefore, it is crucial for the University to maximize the effective use of its current resources while continuously seeking new funding sources and partnerships to remain among the top institutions in the nation.

To implement the University's strategic plan, resources must be carefully allocated to priority projects that align with our strategic objectives. This plan will guide and influence how funds are distributed to initiatives that support the University's vision, mission, and values. To achieve this, the University will:

- **Set Spending Priorities:**
 - Ensure expenditures align with the Strategic Plan;
- **Optimize Resource Use:**
 - Enhance efficiency by streamlining operations, reducing costs, improving productivity, and reallocating resources as needed;
- **Increase Research Funding:**
 - Expand efforts to secure extramural funding for research;
- **Diversify Funding Sources:**
 - Develop alternative revenue streams through venture capital, collaborative projects, philanthropy, and donations;
- **Adopt Modern Financial Practices:**
 - Utilize state-of-the-art accounting principles (GAAP) to maintain transparency and accountability.

SECTION VII: IMPLEMENTATION AND MONITORING OF STRATEGIC PLAN

Strategic plan is only effective if it is implemented and executed with precision. Unfortunately, many plans fail due to a lack of diligent oversight. To prevent this, the University will maintain a high level of vigilance and transparency in monitoring the implementation of its strategic initiatives. Regular reporting and timely corrective actions will be integral to ensuring the success of this plan.

To support this effort, various colleges, schools, institutes, clinical facilities, and administrative units will develop relevant and meaningful indicators to track progress toward the goals outlined in the University's Strategic Plan. These indicators will be evaluated periodically throughout the plan's execution to ensure alignment with our strategic objectives.

Regular reports detailing progress, using these indicators and metrics, will be presented to the Vice Chancellor, University Senate, Syndicate, and other stakeholders. These reports will guide the ongoing execution of the plan and the timely achievement of its milestones.

To ensure fairness and transparency, the University has established an independent Office of Strategic Development & Implementation (OSDI), which reports directly to the Vice Chancellor. This office will be staffed by highly experienced professionals dedicated to overseeing this critical function.

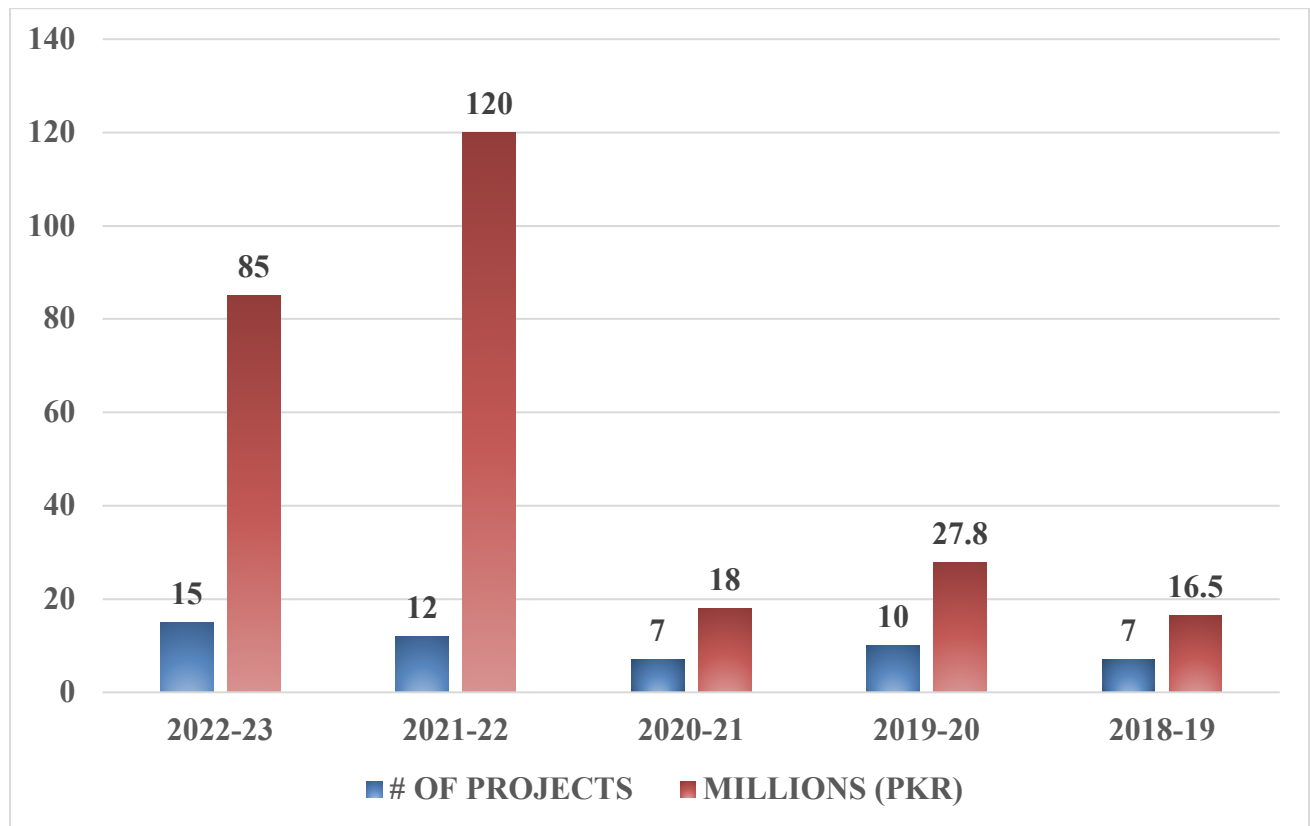
SECTION VIII: LIST OF APPENDICES:

No.	DESCRIPTION
A	Research & Innovation
A.1	List of Signature Research Programs
A.2	Extramural Funding
A.3	Scientific Publications
A.4	Percentage of Publications in Impact Factor Journals
A.5	Patents Submitted/Granted
B	International Rankings Participation of DUHS (2020-2024)
C	Brief List of Accomplishments of Dow University Hospital (2018 – 2024)
C.1	Total Number of Successful Transplants Conducted
C.2	Entablement of New Fully Functional Departments/Units
D	Academic Institutions and Degree Programs Established Since 2018

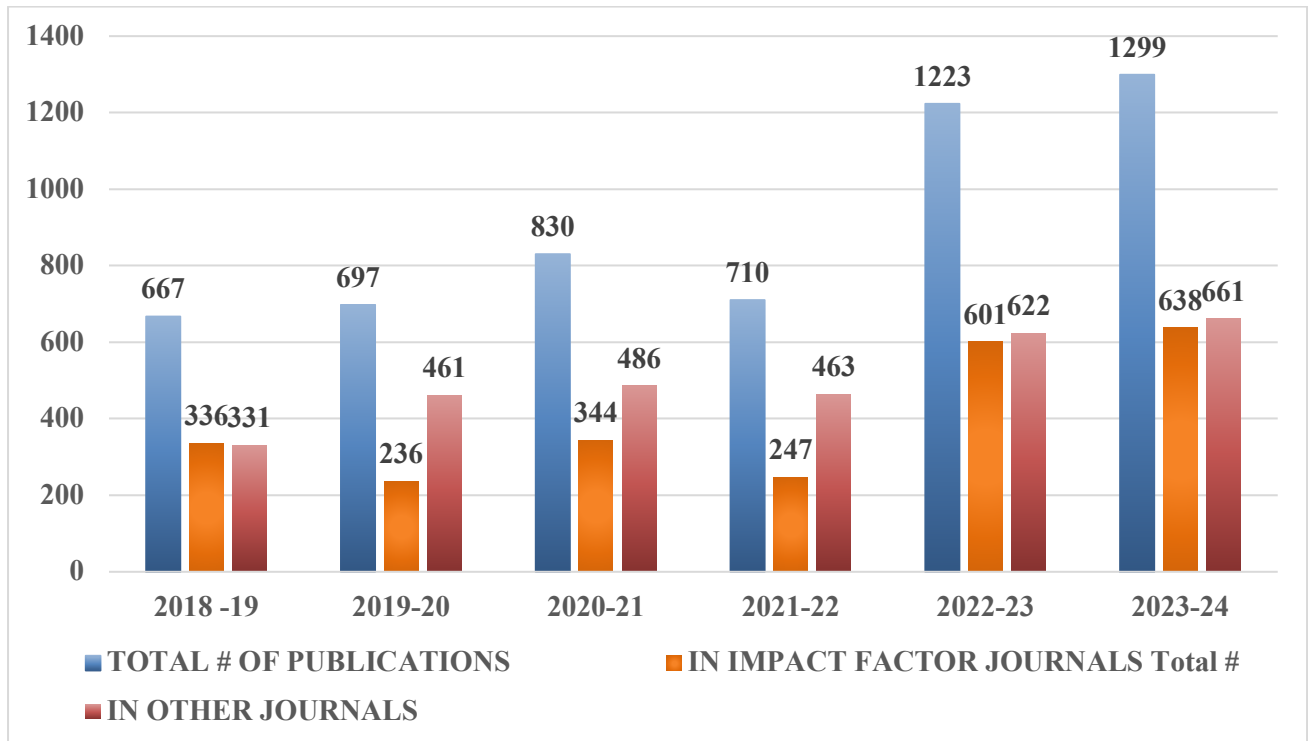
A.1: LIST OF SIGNATURE RESEARCH PROGRAMS AT DUHS:

- **Cancer**
- **Infectious Diseases, Immunity & Inflammation**
- **Precision Medicine, Genomics, and Informatics**
- **Cardiovascular and Metabolic (such as Diabetes, Obesity, etc.) Diseases**
- **Neurosciences**
- **Genomics and Genetics**
- **Regenerative Medicine, Stem Cells, and Transplants**
- **Biotechnology**
- **Applied Public Health**
- **Data Sciences**
- **Emerging Technologies**

A.2: EXTRAMURAL FUNDING:



A.3: PUBLICATIONS (IN IMPACT FACTOR AND NON-IMPACT FACTOR JOURNALS):



A.4: PERCENTAGE OF PUBLICATIONS IN IMPACT FACTOR JOURNALS:

YEARS	TOTAL # OF PUBLICATIONS	IN IMPACT FACTOR JOURNALS	
		Total #	% of Total Publications
2018-19	667	336	50
2019-20	697	236	34
2020-21	830	344	41
2021-22	710	247	35
2022-23	1223	601	49
2023-24	1299	638	49

A.5: PATENTS FILED/GRANTED SINCE 2018:

Title of Invention	Category of IP (Product, Process, Technology, etc.)	Development Status (Idea, Prototype, Validation, Production)	Patent Granting Authority (Name and Details)	National / International	Year	Filed/Granted
Process of treating distillery bio-digester effluent with concomitant microalgae biomass production	PROCESS	PROTOTYPE	Provisional Patent - IPO- Pakistan	NATIONAL	2019-20	FILED
Filed on multivariant mRNA Vaccine Construct	PROCESS	PROTOTYPE	Provisional Patent - IPO- Pakistan	NATIONAL	2020-21	Filed
Licensing for Preclinical Contract Laboratory	PROCESS	Validation	Provisional Patent - IPO- Pakistan	NATIONAL	2020-21	Filed
Polyacrylonitrile based electrospun nanofibers loaded with Zinc Oxide-Quercetin nanoparticles for wound healing	PROCESS	Validation	United states Patent and Trademark Office	INTERNATIONAL	2021-22	Filed
Poultry Vaccines against Ranikhet, Bird Flu and Gumboro Using Indigenous Viral Stains	PRODUCT	PROTOTYPE	Controller of Patent, Patent Office Karachi, IPO	NATIONAL	2022-23	Filed
MAKXHIMETER, AI BASED WEB APPLICATION	PRODUCT	PROTOTYPE	Controller of Patent, Patent Office Karachi, IPO	NATIONAL	2022-23	Filed

B: INTERNATIONAL RANKINGS PARTICIPATION OF DUHS (2020-2024):

Ranking Agencies	2020	2021	2022	2023	2024
1. Times Higher Education World University Rankings	<i>REPORTER status</i>	<i>REPORTER status</i>	<i>REPORTER status</i>	601-800 out of 1799 institutions <ul style="list-style-type: none"> 4th Nationally/29 Universities Highest Ranked pillar of '428' in Research Citations 3% international student population Student: Faculty ratio – 6.8:1 	1201-1500
2. THE World University Rankings by Subject- <i>Clinical & Health</i>	<i>Not ranked</i>	<i>Not ranked</i>	<i>Not ranked</i>	501-600	601-800
3. <i>THE Impact Ranking Overall</i>	601+	801-1000	801-1000 (out of 1406 institutions)	801-1000	801-1000
• <i>THE Impact Ranking SDG 3-Good Health & Well Being</i>	401-600	201-300	101-200	96 Overall in the world	101-200
• <i>THE Impact Ranking SDG 4-Quality Education</i>	401-600	601-800	601-800	601-800	601-800
• <i>THE Impact Ranking SDG 5-Gender Equality</i>	201-300	201-300	401-600	201-300	201-300
4. QS World University Ranking by Subject- <i>Medicine</i>	Not ranked	601-650	551-600	601-650	551-600
5. QS Asia University Ranking*	451-500	401-450	351-400	<i>Not Ranked (Not Eligible)</i>	401-450
* Not Eligible in the future for this ranking exercise					

**C.1: TOTAL NUMBER OF SUCCESSFUL TRANSPLANTS CONDUCTED AT
DOW UNIVERISY HOSPITAL (2018 – 2024)**

Year	Bone Marrow Transplant Count	Liver Transplant Count	Renal Transplant Count
2020	9	4	99
2021	15	15	105
2022	10	36	81
2023	10	61	87
2024 (till July)	5	26	53
Total	49	142	425

C.2: LIST OF NEW FULLY FUNCTIONAL CLINICAL FACILITIES/UNITS ESTABLISHED IN DOW UNIVERSITY HOSPITAL (2018 – 2024)¹:

- **ONCOLOGY MEDICINE UNIT;**
- **SURGICAL ONCOLOGY DEPARTMENT;**
- **ONE STOP BREAST CLINIC;**
- **GENETIC COUNSELLING CLINIC;**
- **AESTHETIC CLINIC;**
- **SCINTIGRAPHY FACILITY (NUCLEAR MEDICINE FACILITY) FOR CANCER PATIENTS ESPECIALLY FOR SENTINEL LYMPH NODE MAPPING;**
- **SPECIALTY CLINICS (INFLAMMATORY ARTHRITIS, SYSTEMIC LUPUS ERYTHEMATOSUS CLINIC (RHEUMATOLOGY UNIT);**
- **FAMILY MEDICINE DEPARTMENT;**
- **FAMILY PLANNING CLINIC (ESTABLISHED IN COLLABORATION WITH THE SINDH HEALTH DEPARTMENT);**
- **THIRTEEN (13) BEDDED DAY – CARE UNIT (MALE AND FEMALE);**
- **NEPHROLOGY WARD;**
- **VASCULAR SURGERY DEPARTMENT;**
- **PLASTIC AND ONCOLOGY PLASTIC SURGERY UNIT;**
- **TEN (10) BEDDED PEDIATRIC ICU;**
- **SLEEP LAB WITH LATEST BODY PLETHYSMOGRAPHY;**
- **SIXTEEN (16) BEDDED SURGICAL / GI HDU;**
- **THREE (3) NEW TRAUMA OT;**
- **ANESTHESIA FITNESS OPD**

¹Until July 2024

**D: ACADEMIC INSTITUTIONS AND DEGREE PROGRAMS
ESTABLISHED SINCE 2018**

COLLEGES/SCHOOL/INSTITUTES

Colleges/School/Institutes	Approval date
Dow Institute for Advanced Biological and Animal Research	April 03, 2021
Dow Institute of Physical Medical and Rehabilitation	October 17, 2020
Department of Visual studies & Ophthalmology	January 29, 2020
Dow Institute of Nursing & Midwifery (Renamed)	January 29, 2020
School of Postgraduate Studies	July 13, 2019
Institute of Business & Health Management (Renamed)	July 13, 2019

UNDERGRADUATE PROGRAMS

Program Name	Approval date
BS Accounting & Finance	2024
BS Public Health	July 28, 2022
BS Psychology	June 25, 2022
BS Optometry	November 30, 2019
Post RN BS Midwifery	September 28, 2019

POSTGRADUATE PROGRAMS- HEC NOC

Program Name	NOC date
MPhil Medical Technology	July 31, 2024
MPhil Molecular Medicine	May 20, 2024
PhD Pathology	November 11, 2023
PhD Molecular Medicine	June 10, 2023
PhD Public Health	January 22, 2021, w.e.f. January 01, 2014
MPhil in Pharmacy Practice	December 24, 2020

POSTGRADUATE PROGRAMS OFFERED

Program Name	Offered date
PhD Medical Education	2023