



SRI RAMACHANDRA

INSTITUTE OF HIGHER EDUCATION AND RESEARCH

(Category - I Deemed to be University) Porur, Chennai



VISION - 2040

1.0. VISION-2040: Need and Methodology adopted to develop VISION-2040 Document:

Sri Ramachandra Institute of Higher Education and Research (Category-I Deemed to be University), in its quest for excellence in Teaching, Healthcare and Research has always enthusiastically responded to National Policy reforms as well as sought to meet the global standards of international quality higher education. SRIHER has already adopted its existing VISION-2025 document through its statutory body, the Board of Management and has been implementing the immediate and medium-term goals efficiently.

During the last five years, Education in general and higher education in particular has evolved globally relevant and nationally required reform policies through approved policy documents, which have necessitated universities to re-enact themselves with newer policies and programs to suit the national priorities and international competencies. Accordingly, the universities are required to redesign their VISION documents. The major policy reforms of Government of India are:

1.1. Government of India has developed a landmark reform in Education and announced the “National Education Policy-2020” (NEP-2020) with due approval by the Cabinet and the Parliament. Accordingly, all State Governments and the Universities have been asked to reshape the Indian Higher Education System in totality through reforms across the various domains of higher education, including their Governance systems.

1.2. During the last three years, NITI Aayog, Government of India has brought out a policy document termed, “India’s Public Health Surveillance by 2035” based on Health Systems for New India: Building blocks-potential pathways to Reforms. Being the healthcare-centric university, it has also become imperative to integrate mechanisms of surveillance based on unitized, citizen-centric comprehensive electronic health records(EHR) with unique health identifiers (UHID) through the enhanced use of new data analytics, data science, artificial intelligence, machine learning and advanced health informatics.

Since Non-Communicable diseases, reproductive and Child health, Occupational and Environmental health are to be integrated into public health surveillance including antimicrobial resistance and predictive capability of pandemics management. The Health care-centric higher education institutions have an obligation to generate capacity-built manpower to handle community-based surveillance, use of point of care devices and self-care diagnostics, new diagnostic technologies including molecular diagnostics, phenotyping and genotyping.

1.3. NITI Aayog's "Strategy for New India @ 75 Is yet another policy document of Government of India which enlists comprehensively all the areas of development, especially Including Employment and Labour Reforms,

Technology and Innovation, Industry, Modernizing Agriculture, Policy & Governance, Value Chain & Rural Infrastructure, Travel, Tourism and Hospitality, Minerals, Energy, Surface Transport, Railways, Civil Aviation, Digital Connectivity, Smart Cities for Urban Transformation, Swachh Bharat Mission, Water Resources, Sustainable Environment, School Education, Higher Education, Teacher Education and Training, . Skill Development, Public Health Management and Action, Comprehensive Primary Health Care, Human Resources for Health, Universal Health Coverage, Nutrition, Gender, Senior Citizens, Persons with Disability and Transgender Persons.

1.4. Ageing in India: With roughly 1.3 billion inhabitants, India is projected to become the world's most populous country within a decade. Currently, the 60+ population accounts for 9% of India's total population, translating into roughly 103 million older people. Including the preretirement phase (i.e. population in age 45+), the proportion will rise to over 30%, or almost 600 million people. Between 2011 and 2050, the number of oldest old people of age 75 and above is expected to increase by 340%. The old-age support ratio (the number of persons aged 15 to 64 per person aged 65 or older) will also fall dramatically from 13 to 5, largely as a result of fertility decline and increasing life expectancy. Overall, little is known about the total disease burden, public health needs, economic and social implications of the growth of the elderly population in India.

While India is being propelled to a position of international eminence, it faces three main domain of health challenges: first, dealing effectively with unfinished agenda of communicable diseases, maternal and child health, and health systems strengthening; second, dealing with new emerging challenges such as the premature burden of NCDs; and third, dealing with globalization related issues while contributing to the management and shaping of the global policy environment in India.

The rapid rise of India's elderly population, coupled with changing family structures and limited social provisions, presents policy makers with pressing economic, health, and social challenges. There are several forces driving India's population growth and changing age structure, including an upward trend in life expectancy. An Indian born in 1950, for example, could expect to live for 37 years, whereas today India's life expectancy at birth has nearly doubled to 69 years; by 2050 it is projected to increase to 76 years. This trend reflects significant declines in infant and adult mortality rates and improvements in survival rates at all ages. As a result, India's population will rise from 1.3 billion today to an estimated 1.7 billion by 2050, with a much larger elderly number of around 350 million.

The Longitudinal Ageing Study in India (LASI): Considering the void in scientific data, the Longitudinal Ageing Study in India (LASI) project was launched under the aegis of the Ministry of Health and Family Welfare (MoHFW), Government of India. LASI will contribute greatly to the newly launched the National Programme for Health Care of the Elderly (NPHCE) and the social and economic security programmes planned to be initiated by the Ministry of Social Justice and Empowerment (MoSJE). LASI will help in expanding the scope of health and social security policy and programmes.

All the above have necessitated universities, especially Medical and Health Sciences institutions to evolve multipronged approaches to handle the health, economic and social burden of the elderly with suitably trained manpower, path breaking research for diagnostic, prognostic and therapeutic applications to handle the cognitive functions of the elderly and provision of good quality of life.

1.5. Government of India policy document on, "AYUSHMAN BHARAT" is a big leap towards recommending schemes to achieve universal health coverage in India. It has incorporated schemes/guidelines for (i) Drive citizen and partner engagement (ii) provisioning of standardised care (iii) Grading providers-'Hospital performance and 'quality index' (iv) Devising a national pricing index system (v) Ayushman Bharat learning academy and e-learning system (vi) Leveraging integrated technology and health analytics (vii) Mandatory healthcare coverage for all (viii) Shaping healthcare market place and (ix) Rethinking 'private' as 'partners'.

In view of the above Government of India Policy directives to universities in general and Medical/Health science institutions in particular, SRIHER is necessitated to review its VISION-2025. In addition, SRIHER has also subjected itself for reaccreditation by the National Assessment and Accreditation Council (NAAC) for the 3rd Cycle. As a Category-I Deemed to be University based on the NAAC-Grade "A" and CGPA of 3.62/4, it is

expected that SRIHER needs to proactively update the Vision, Mission, Goals along with scoping of SRIHER policies and programmes in tune with NEP-2020.

In view of the above, the Internal Quality Assurance Cell (IQAC) of SRIHER proposed to develop an updated “Vision-2040” document in its entirety, in conformity with the implementation period of NEP-2020 . The proposal was duly approved by the University Development Committee (UDC) with Vice Chancellor, SRIHER as its chairman. Subsequently, the Vice Chancellor has constituted the “VISION-2040 Committee” with the following members to develop the draft of the document.

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| 1) Dr.P.V.Vijayaraghavan,
Vice Chancellor,
SRIHER | Chairman |
| 2) Dr.S.P.Thyagarajan,
Professor of Eminence & Dean (Research)
SRIHER | Convener |
| 3) Prof.Caven S.McLoughlin
Professor of Psychology,
Kent State University,USA | International Expert on Accreditation-Member |
| 4) Dr.A.Ravi,
Professor of General Surgery
Senior Co-ordinator,
IQAC-SRIHER | Member |
| 5) Dr.D.Chamundeeswari,
Professor of Pharmacognosy
Co-ordinator,
IQAC- SRIHER | Member |
| 6) Mr. Narasimman Swaminathan,
Professor of Physiotherapy
Vice Principal, Faculty of Allied Health Sciences,
SRIHER | Member |
| 7) Dr.D.C.Mathangi,
Professor & Head,
Department of Mind Body Medicine & Lifestyle Sciences,
SRIHER | Member. |

1.1. The Process of Preparation of Vision-2040 Document:

- (i) Framework development by the Steering Committee of IQAC
- (ii) Development of draft Vision-2040 document through in person and electronic discussions and drafting by the Vision-2040 Committee
- (iii) Faculty consultative process through circulation of the draft Vision-2040 for feedback responses
- (iv) Placing of the Vision-2040 draft Document before the SRIHER Board of Management for approval and adoption in its meeting held on 16th December,2020.
- (v) Revision of the original SRIHER VISION-2035 document as SRIHER VISION-2040 document incorporating the suggestions made by the members of the BOM.
- (vi) Submission of the BOM approved SRIHER VISION-2040 document to the NAAC Peer Team of Experts for consideration during the 3rd Cycle Reaccreditation process.

2.0. VISION 2040 ~ Sri Ramachandra Institute of Higher Education and Research: A prelude.

“A university will mean a multidisciplinary institution of higher learning that offers undergraduate and graduate programmes, with high quality teaching, research, and community engagement. The definition of university will thus allow a spectrum of institutions that range from those that place equal emphasis on teaching and research i.e., Research-intensive Universities to those that place greater emphasis on teaching but still conduct significant research i.e. Teaching-intensive Universities.” (p. 34, Government of India-National Education Policy-NEP 2020)

Sri Ramachandra Institute of Higher Education and Research (SRIHER) is a Category-I Deemed to be University, declared by the University Grants Commission (UGC) and ranked 28th among the Indian Universities by the National Institutional Ranking Framework (NIRF), Government of India. Being a tertiary-level university engaged in high quality teaching, healthcare and research in the preparation of medical and allied-health professionals and researchers with preventive, promotive and curative healthcare to millions of health seekers, SRIHER is currently accredited by several national and international accreditation bodies in view of its high quality Faculty, state-of-art infrastructure and global collaborations well supported by a nationally recognized hospital/medical Centre serving as a real-World training laboratory.

Consistent with its role as an evidence-based health care and research-intensive instructional setting, the university engages in rigorous, regular, and authentic self-evaluation.

Future planning has always been an institutional habit in SRIHER and is universally viewed across campus as a necessary investment for maintaining high quality. For example, the most recent Master Plan encapsulating system-wide Goals for 2025 was based on a consultative process that incorporated faculty, staff, and administrative input as a preface to campus-wide refinement. Multiple stages of input on format, content, and procedure were assimilated. This extensive and intensive process led to the development of the ‘SRU VISION 2025’ Master Plan, which received approval of Board of Management of SRIHER on August 8, 2011.

In view of the adoption of the National Education Policy-2020 by Government of India and since the process of its implementation has already started at the Central and State Government levels, Indian Universities are expected to redesign, refocus and reform their respective VISION in tune with that of the NEP-2020. Hence SRIHER is of the considered opinion that it is time for a similar VISION document process to be undertaken, one decade later, with an anticipated institutional approval of the VISION 2040 document. Thus, exactly one decade after the development of the 2025 VISION, the entire campus recently initiated the process of institution/community-wide engagement in developing the VISION 2040 Plan. This process makes considerable demands on the time, energy and investment of faculty, administration and staff; yet, the benefit is broadly seen as entirely worth the effort.

At the initiation of each new planning process to develop a future VISION, the university first identifies the constituency that it primarily serves. Retrospectively, we can now clearly identify that the 2025 VISION, as it was written 10-years ago, visualized India as its primary audience. However, the place of SRIHER-DU within the fast-developing medical infrastructure and expectations of Indian Higher Education has changed dramatically over the past decade.

Now, the University is ready to step up to its rightful place among the top-10 Indian Universities in general and medical & allied-health training institutions of all India, in particular. Moving ahead SRIHER also envisions

its successful participation in World University Rankings. Thus, we anticipate that the primary audience for the university's VISION 2040 Master Plan will ***shift from a national to an international playing field***.

We therefore anticipate that the VISION 2040 Master Plan for SRIHER will address and incorporate India's ***national*** priorities for higher education synergized with the global sustainable development goal on education. While the university's contribution will continue on medical/allied-health specialties, the revised emphasis for SRIHER is expected to evolve as a multi-disciplinary institution, encompassing technology, liberal arts, humanities and social sciences to address India's contemporary and most pressing needs, besides international demands in the sphere of higher education. These have been identified in the recently published conceptualization for India's education future, ***National Education Policy- 2020***, as shared by the Ministry of Human Resource Development, Government of India.

To this end, the construction and ordering of the SRIHER VISION 2040 will reflect the principles and component elements of NEP-2020 serving as a guide to the construction of our own institution-specific VISION 2040.

This university is readying itself to address national and international needs, and therefore the SRIHER- 2040 VISION will be founded on, and be directly influenced by, governmental directives on the future of education in India in addition to international expectations from Indian Higher Education.

Thus, in broad principle, the guiding factors for our campus-wide conversations and development of SRIHER's VISION 2040 will embed the NEP 2020 foci of:

1. Teaching future medical providers' practical skills in the management of epidemics and pandemics to include, Public health surveillance, collaborative research in infectious disease and non-communicable disease management and development of vaccines.
2. Developing an enhanced understanding of means for combating the medical sequelae of climate change; ameliorating increasing pollution and depleted natural resources; developing alternate sources of energy and technology besides health-related needs for clean water, nutrition and cost-effective sanitation
3. An emphasis on scientific & technological advances such as 'big data', machine learning, and artificial intelligence.
4. Prominent inclusion of instruction in mathematics, computer science, and data science.
5. Highlighting the importance of multidisciplinary collaboration across the sciences, social sciences, arts and humanities.

The development of a relevant instructional curriculum will, we anticipate, provide emphases upon:

1. Content-centered and competency-based curricula that demand enhanced skills in critical thinking for solving problems; how to be creative and be multidisciplinary; and how to innovate, adapt and absorb new information in novel and fast-changing changing medicine/health fields.
2. A greater emphasis upon experiential, holistic, integrated, inquiry-driven, discovery-oriented, learner-centered, discussion-based, and flexible instruction leading to Outcome-based Higher Education.

Consistent with the NEP 2020 national agenda for medicine and allied-health higher education, SRIHER plans to emphasize a recommitment to research and innovation by setting up start-up incubators, and technology development centers in frontier areas of research incorporating even greater industry-academic linkages that accentuate the benefits of interdisciplinary research.

Given the current scenario of epidemics and pandemics, we believe it is critical that SRIHER take a lead to establish public health surveillance system net-working with the Central and State Government, undertake

research in areas of infectious diseases, epidemiology, virology, diagnostics, instrumentation, vaccinology and relevant medicine/health areas.

Consistent with Section 20.5 of NEP 2020, the SRIHER VISION 2040 is moving towards an instructional environment with a greater emphasis on *preventive healthcare and community medicine* consistent with India's current and future needs. Specifically, as a national leader in medicine and allied health, SRIHER commits to offering high value professional education for future leaders in India's medicine/health sectors.

This introductory prologue presents the conceptualization of SRIHER's VISION-2040, based on which, after the due consultative process, the ensuing chapters on Goals, Objectives and Roadmap are evolved, projecting the anticipated outcomes.

2.1. Founder's Vision

"To offer diverse educational programmes that facilitate the development of competent professionals and valuable citizens, who demonstrate excellence in their respective disciplines, while being locally and globally responsive in areas of education, healthcare delivery and research"

2.2. Mission at the Evolution of the Deemed University

Sri Ramachandra Institute of Higher Education & Research, will actively promote and preserve the higher values and ethics in education, healthcare and research and will pursue excellence in all these areas while consciously meeting the expectations of the people it serves without prejudice and in all fairness stay socially meaningful in its propagation of the various arts and science to enrich humanity at large.



2.3. Description of Emblem

The university emblem has four salient images depicted: The **red triangle** with its apex pointing up, the **bow**, the **arrow**, and the **entwined snakes**.

The **triangle** with the arrow underscores the Mission of the university: viz., to merge the three enduring objectives – **Education, Healthcare & Research** – represented by its three sides into a harmonized whole and hold it launched boldly up into the future.

The **arrow** stands for the wand of Hermes (or the staff of Asclepius) and with the two **entwined snakes** represents the caduceus, which has traditionally been used as the symbol of the medical profession.

Uniquely, the **bow** here adds dynamism and a further dimension to the theme as it holds the arrow pointed towards posterity.

2.4. Motto

- Sky scale Advancing Education
- Disease Alleviating Healthcare Innovation
- Translatable Research Continuum

3.0. Sri Ramachandra Institute of Higher Education and Research: Vision Statement – 2040

Sri Ramachandra Institute of Higher Education and Research, will evolve as a multidisciplinary University emerging as one among the Top One-Hundred Universities globally, 20 Universities in the South East Asian

Region (SEAR) and 10 Universities in India, through competency-based Education, Healthcare and Translational multidisciplinary Research that impacts Economy and Society.

3.1. Goals & Objectives for Vision 2040

3.1.1. Immediate Goals to evolve SRIHER as 'multidisciplinary' university- To be achieved by 2025

1. Establish new super-specialities in medical disciplines and new faculties/ departments in the university
2. Establish off-campus and off-shore campus for Medical and Allied Health Sciences of SRIHER
3. Introduce the School system of the Faculties of SRIHER in tune with NEP-2020
4. Integrate modern medicine with traditional systems and lifestyle modifications; initiate Faculty of Integrated Medicine and offer trans-disciplinary programs
5. Build Engineering & Technology programs in emerging interdisciplinary areas of Medical Technology, Artificial Intelligence, Machine-learning, Data-analytics and Skills /Entrepreneurship ~ through novel UG & PG programs
6. Synergy of technology in healthcare sciences through the introduction of an interdisciplinary program by the creation of a Faculty of Health and Wellness Technology.
7. Introduce a Faculty of Humanity and Social Science, and a Faculty of Liberal Arts and Languages
8. Launch new UG/PG programs through twinning and joint degrees with Indian and Foreign Universities
9. Build UG/PG/Research Programs of international relevance and employability ~ with students having the mobility to industry & other partnering institutions with credit transfer facility, utilising the Academic Bank of Credits (ABC) scheme of Ministry of Education, Government of India.
10. Add International Visiting Scholars for each department to nurture faculty members
11. Earn International accreditation for programmes offered in SRIHER
12. Establish a 'Centre for Open-Distance/ Online Learning' with E-resources Development Centre to develop and offer UG/PG degrees, diplomas and Massive Open Online Courses (MOOC) through a multidisciplinary approach
- 12.1. Establish Centres of Excellence in cutting-edge areas of STEM:
- 12.2. Acquiring the status of "Centres of Excellence" in clinical, non-clinical and basic medical and paramedical science disciplines.
- 12.3. Becoming recognized as an "International Centre of Excellence in Translational Medicine & Biomedical Nanotechnology."
- 12.4. Recognition of departments/centres in Faculties/ medical centre as ICMR/DBT/DST/DRDO/FIST – Advanced Centres of Research in Areas of Excellence.
- 12.5. Recruitment of renowned research scholars whose excellence will strengthen the Research Centres of Excellence.

13. Academia-Industry Partnerships

- 13.1. Establish the “Science & Technology Park” with “Industries on Campus for Innovation and Invention” through partnership with industries
- 13.2. Augment relations with industries in India and abroad for enhancing patient care through new drugs, PoC diagnostics, gadgets, medical devices, software, etc. Multi-dimensional research & innovation ecosystem to nurture academia-industry collaboration
- 13.3. Partner and collaborate with industry through their CSR initiatives via shared vision and collective ambition that strengthen education and research
- 13.4. Expand the “Start-Up Culture” through Sri Ramachandra Innovation-Incubation Centre – SRIIC by establishing BIRAC-BIONEST BIOINCUBATOR and Entrepreneurship Development Centre and through MHRD-IIC/AIIRIA program.
14. Strengthen international collaborations to 30 Global universities ranked within the TOP-500 Universities in the World and promote yearlong activities with collaborating institutions.
15. Develop multiple campuses of SRIHER to evolve the institution into a 24/7 ~ 365 day, dynamic Sri Ramachandra MediCity.
16. Partner with top-ranked international universities (Institutes) to offer twinning programs and promote mutually beneficial, collaborative research ventures.
17. Establish Alumni Chapters across India
18. Develop Promotion of Indian Higher Education Abroad (PIHEAD) programs to attract foreign students into SRIHER
19. To improve the intra and inter institutional communication system
20. To focus on faculty development/professional development and technology development programs.

3.1.2 Medium Term Goals - To be achieved by 2030

1. Increase the student strength to over 14,000 from the present 7188 and the recruitment of additional faculty to achieve a Teacher/student ratio of 1:9.0
2. Provide training to faculty in partnership with MoU-signed international institutions
3. Develop opportunities to support students financially through on-campus employment ~ including research assistantships and teaching fellowships
4. Collaborate with reputable global universities of Top 500 world ranks to strengthen teaching & research – to reach 40, with consistent yearlong productive activities
5. Create ‘International Centres of Excellence’ in selected core areas to facilitate exceptional quality research
6. Establish offshore campuses to enhance a global presence
7. Consolidate Alumni Chapters in each continent
8. Scale-up in University World Ranking to become a top-500 institution

9. To establish new Schools of Higher Education to facilitate strengthening of multidisciplinary manpower generation
10. To achieve a 100% placement record

3.1.3. Long Term Goals - To be achieved by 2035

1. Academic programs offered by SRIHER through its 28 constituent Schools to be increased to 275 and student strength to over 30,000.
2. Program based global accreditation across all the faculties
3. Introduction of Faculty of Agriculture and Human Health, and Faculty of Law
4. Establish AYUSH Faculties
5. Recruit faculty with diverse expertise to meet the new Institute Growth Plan and increase student strength, and also reach a teacher: student ratio of 1:8.0
6. Attract worldwide faculty and students to represent ~20% of faculty and student census
7. Collaborate with 100 universities worldwide with 50 universities within top 500 world ranks
8. Establish international Centres of Excellence and additional speciality Collaborating Centres of WHO
9. Establish international student exchanges and mentoring program
10. Enhance institution student scholarship to INR 50 Crores
11. Involve alumni in institutional management and resource mobilization
12. Scale-up in World Ranking to top-300 status.

3.1.4. End Term goals to be achieved by 2040:

1. 300 Academic programmes to be offered through 30 Schools of SRIHER with student strength of over 36,000 and a teacher: student ratio of 1:7.0.
2. Introduction of the Schools of Agriculture and Human health and Earth & Ocean Sciences and School of Law
3. 43 Centres of focussed areas of novel healthcare and Research& development of international repute.
4. To achieve the world university rank of within Top 100 universities
5. To successfully get the Institution of Eminence Status from Ministry of Education, Government of India.
6. To augment and introduce programmes in aeronautical and automatic engineering and also space sciences under Faculty of Engineering
7. To discuss threats of chemical weapons

21. MISSION PROGRAMMES TO ACHIEVE 'SRIHER – VISION – 2040'

1. Enable holistic development of students through integration of technological advances, practical experience, research involvement and inter-disciplinary exposure within the curricula of all academic programs.
2. Foster inter-institutional collaborations for the development of joint academic programs straddling medical, health, engineering and technology, liberal arts and humanities, basic and applied Sciences, and management sciences ~ providing multi-disciplinary higher education with horizontal mobility allowing graduates to pursue novel educational tracks and acquire global competencies by joining the "Academic Bank of Credits" Scheme of Government of India and implementing the 'Credit Transfer System'
3. Create multiple industry-academia partnerships to support academic programs, industry-immersion semesters in order to enhance institutional visibility and facilitate increased employability and future job placement for graduates.
4. Expand patient services to cater to local, regional, national and international requirements using a network of on-site and off-site Centres through the effective harnessing of technology and tele-medicine services.
5. Develop a captive healthcare service base through MOUs with corporate entities, governmental programs, foundations, insurance and other institutional employers.
6. Nurture growth in research capacity among students and faculty through financial and administrative support; with incentives to explore both traditional and uncharted areas with courage and creativity.
7. Create dedicated tracks for faculty in education, healthcare, research and administration to increase the volume and quality of research output in clinical, laboratory and community based field-research and translation-research, and achieve high impact in peer-reviewed media while enriching the local and global health research/policy priorities with cross-fertilization of ideas across disciplines.
8. Retain and attract professionals with superior competencies, from India and abroad, in teaching, research and administration through progressive and transparent institutional policies that provide flexibility and recognize accomplishment while providing accountability for compensation packages.
9. Create multiple Global Centres of Excellence within campus as flagships for the nation in specific core areas of specialization.
10. Invest in dedicated marketing initiatives those broadly show-case the institution's credentials.
11. Provide state-of-art infrastructure and create specialized centralized teaching-technology laboratories (viz. skills/simulation labs including cadaver labs/simulated anatomy lab and e-learning multimedia centres, studios and classrooms).
12. Enhance student support, student participation, student exchange and student rewards and awards.
13. Encourage and establish a Centre/Faculty of Online & Distance Education Programmes

5.0. THRUST AREAS PROPOSED FOR THE PROPOSED GOALS IN THE VISION-2040 DOCUMENT

5.1. HEALTHCARE

5.1.1. Rural Health

- Urban slum-care programmes
- Telemedicine to reach rural areas through IT
- Mobile Clinic approaches
- Mass screening as a population-based service
- Field level use Point of Care Diagnostic Kits development

5.1.2. Public health surveillance system and preparedness for Epidemics and Pandemics ---Molecular epidemiology

5.1.3. Infectious Diseases

- Antimicrobial research and participation in national schemes
- Diagnosis including Virology Services
- Development and Clinical validation of Vaccines and diagnostics

5.1.4. Non-Communicable Diseases

- Studies on Life Style diseases, epidemiological, molecular, epigenetic and newer drugs
Evaluation and management
- Clinical research in Chronic Diseases and Oncology

5.1.5. Indian Systems of Medicine

- Standardization & Validation
- Integration of Allopathy + ISM as a national model
- Integrative medicine guidelines and Research in Life Style disease and cancers

5.1.6. Disaster Medicine

- Natural and Manmade Disaster management programmes
- Triage and Trauma Care concentrations

5.1.7. Geriatric Health Care

- Diagnosis and clinical management of Alzheimer/Parkinson/ Dementia
- Cognitive disorder research

5.1.8. Psychiatric Ailment

- Depression/Anxiety

- Palliation medicine

5.1.9. Public Health

- Health-impact of air pollution
- Environmental Health
- Occupational Health
- Climate Change
- Chemical Warfare – Policy development in Public Health

5.2. INNOVATIVE MEDICAL AND MULTIDISCIPLINARY EDUCATION:

- Setting up virtual learning infrastructure by way of media centre/AV studio, skills/Simulation laboratories with multimedia soft wares; VR/AR laboratories, etc.;
- E-Learning and use of NKN-Grid, Bharat Net, DIKSHA and MOOCs through Swayam, NPTEL, CEC, Coursera etc.,
- Establishment of Centre for ODL/On-line education to offer degrees, diplomas and certificates in multidisciplinary areas including Professional areas, Vocational subjects, e- Lok Vidya, Humanities, Social sciences, Languages and Liberal arts and Global Citizenship Education
- Rural Health Care and preventive and promotive health education programmes
- Integration of ISM + Allopathy knowledge & practice, Mind-Body Medicine programmes
- Bedside Experience to be made an integral component
- Linkages with foreign Universities with student & faculty mobility
- Expansion of Paramedical Education programmes (both face-to face and online programmes)
- Educational Programs in the areas of Psychology and Rehabilitation Sciences
- Blended Online education programs in Interdisciplinary Physics, Chemistry and Mathematical Sciences
- Academia-Industry educational cum training degree cum Vocational programmes in Skills, Entrepreneurship and Innovation
- Teaching, Training and Research programs in AYUSH Systems of Medicine and Health & Wellness.
- Teaching and interdisciplinary research programs in novel branches of Law
- Teaching and interdisciplinary research programs in collaboration with industries in novel branches of Fashion Technology and Design

5.3. BIOMEDICAL RESEARCH AND DEVELOPMENT: *Priority areas to include:*

- Drug discovery and Vaccines development
- Translational Medicine
- Traditional Systems of Medicine
- Diagnostic Kits for Infectious Diseases
- Biomedical Instrumentation and Medical Devices Development
- Metabolic Disorders
- Nano Medicine
- Pharmacogenomics

- Biodefence
- Health economics and policy development

5.4. PARTNERSHIPS, COLLABORATIONS AND PROGRAMMES

- Strengthening partnerships through collaboration & cooperation with national and international institutions.
- Participating in the National Academic Bank of Credits (ABC) programme of Government of India by adopting flexibility and horizontal mobility for students with credit transfer facility.
- Setting up of joint-degree multidisciplinary programmes with foreign universities
- Inter- & Intra-faculty collaboration within departments of the university
- To synergise with NMC – Vision document integrating medical education and medical research by developing an Integrated MBBS/Ph.D. programme of study
- Institutional support for ‘Student-exchanges under summer research programme for undergraduates to be scaled up to promote greater participation by international students through study-abroad programmes.

5.5. INTERNATIONAL SHOWCASING THE UNIQUE STRENGTHS OF THE UNIVERSITY

- Based on the strengths in Environmental Health, Clinical Research, Biomedical Sciences, Integrated Systems of Medicine, etc., the following activities may be considered as priorities:
1. Development of a National Training Module for Environment Health impact norms and Occupational Health Safety for Healthcare Professionals, policy makers and general public.
 2. Translational Biomedical Research platforms and scale-up systems for diagnostics, new drug molecules and candidate vaccines to project competencies of SRIHER in the Industrial Medicine & Industry Safety Standards areas.
 3. Leveraging the original research outcomes on Life-Style diseases, early diagnostic markers and novel management strategies to evolve national guidelines for adoption and practice.
 4. Internationalising the Start-up/Incubator facilities in the Medical ecosystem to transform patents to products and products to ‘block-busters’.
 5. Integrated joint Clinical Trials on drugs of Indian System of Medicine along with Allopathic Medicine, as per the VISION document of Department of AYUSH, Government of India.

5.6. CORE STRATEGIES TO ACHIEVE SRIHER VISION- 2040

- Priority search for world-renowned faculty with incentives to retain them.
- Vision and Mission Statements should not only be in the documents, books and on the walls of the university, but in the hearts of each and every member of SRIHER family
- Thrust Areas identification and road maps for implementation;
- Timeline & Milestones projection;
- Implementation strategies with institutional commitments; and

- An Annual Review system through expert Committees and University Statutory bodies along with merit based reward-incentive system.

6.0. ROADMAP CONCEIVED TO ELEVATE SRIHER AS MULTIDISCIPLINARY SRI RAMACHANDRA UNIVERSITY, AS PER NATIONAL EDUCATIONAL POLICY-2020.

The policy decision of NEP-2020 is that all types of universities including State Affiliating Universities, Deemed to be Universities, Private Universities etc., shall henceforth be designated uniformly as “UNIVERSITIES.” Accordingly, by 2021-2022 SRIHER will officially be designated as “SRI RAMACHANDRA UNIVERSITY.”

The international model of “School System within the University” will be instituted in place of the existing Faculty system. In addition to the existing faculties which would be re-designated as Schools, new Schools will be established in SRIHER within which, appropriate Departments and Centres of Education and Research will be established with the mandate of multidisciplinary functioning with all Schools of the University. There will also be University-level Centres of Excellence in Education & Professional Development, Research & Development, Health Care & Community Engagement, Entrepreneurship and Skill Development, Innovation and Incubation and ODL/Online education.

6.1. PROPOSED SCHOOL-SYSTEM ARCHITECTURE FOR SRI RAMACHANDRA UNIVERSITY:

Existing College/Faculties in SRIHER as in 2020-21* to be re-designated as Schools			
Sl. No	School/ Faculty of SRU	Statutory body	Need-based requirements
1.	Sri Ramachandra Medical College and Research institute	NMC	Existing infrastructure sufficient Scope for starting autonomous Medical College with dedicated infrastructure
2.	Sri Ramachandra Faculty of Dental Sciences	DCI	Existing infrastructure sufficient
3.	Sri Ramachandra Faculty of Pharmacy--To be strengthened	AICTE/PCI	Additional building/infrastructure required to match expansion
4.	Sri Ramachandra Faculty of Nursing	INC	Existing infrastructure sufficient
5.	Sri Ramachandra Faculty of Physiotherapy--To be strengthened	SRIHER/ UGC/AHS Council	Additional building/infrastructure required to match expansion
6.	Sri Ramachandra Faculty of Allied Health Sciences--To be strengthened	UGC/AHS Council	Dedicated building/infrastructure required to match expansion
7.	Sri Ramachandra Faculty of Biomedical Sciences, Technology and Research	UGC	Existing building/infrastructure sufficient
8.	Sri Ramachandra Faculty of Management Sciences--To be	AICTE	Dedicated building/infrastructure required to match expansion

	strengthened as School of Business		
9.	Sri Ramachandra Faculty of Public Health	UGC	Existing infrastructure sufficient
10.	Sri Ramachandra Faculty of Engineering & Technology--To be strengthened	AICTE	Dedicated Building/infrastructure required to match expansion
11.	Sri Ramachandra Faculty of Sports & Exercise Sciences	UGC	Existing infrastructure sufficient
12.	Sri Ramachandra Faculty of Clinical Research --To be strengthened	UGC	Separate building required
New Schools -- 2021-2040			
	School/ Faculty of SRU	Statutory body	Proposed Period of Establishment
13.	Sri Ramachandra School of Liberal Arts and Languages	UGC	2021-25
14.	Sri Ramachandra School of Psychology and Rehabilitation Sciences	UGC/RCI	2021-25
15.	Sri Ramachandra School of Humanities and Social Sciences	UGC	2021-25
16.	Sri Ramachandra School of Interdisciplinary Physics, Chemistry and Mathematical Sciences	UGC	2021-25
17.	Sri Ramachandra School of Integrative Medicine & Wellness	AYUSH	2021-25
18.	Sri Ramachandra School of Skills, Entrepreneurship and Innovation	AICTE	2021-25
19.	Sri Ramachandra School of Catering & Hospitality Technology	AICTE	2021-25
20.	Sri Ramachandra School of AYUSH	AYUSH	2021-25
21.	Sri Ramachandra School of Fashion & Design Technology	AICTE	2021-25
22.	Sri Ramachandra School of Architecture & Industrial designs	AICTE	2021-25
23.	Sri Ramachandra School of Law	BCI	2026-30
24.	Sri Ramachandra School of Forensic Sciences and Applied Crime Technology	UGC	2026-30
25.	Sri Ramachandra School of Alternate Sources of Energy & Technology	AICTE	2026-30
26.	Sri Ramachandra School of Water Resources & Clean Water Technology	AICTE	2026-30
27.	Sri Ramachandra School of Defense Sciences & Technology	UGC	2031-35
28.	Sri Ramachandra School of Space Sciences & Technology	AICTE	2031-35

29.	Sri Ramachandra School of Agriculture and Human Health	Agriculture Council/ICAR	2036-40
30.	Sri Ramachandra School of Earth & Ocean Sciences	UGC	2036-40

6.2. Centres of Excellence in Education, Healthcare and Research at SRIHER (Ongoing) proposed during 2021-2035

Sl.No.	Name of the Centre	Recognized & Financed By	Location in SRIHER	On-going /Proposed
1	WHO Collaborating Centre for Research & Training in Environmental & Occupational Health	WHO, Geneva/ SRIHER	Faculty of Public Health- Dept. of Environment Health Engineering	Ongoing Since 2007
2	MCI/NMC Nodal Centre for Medical Education Technologies	Medical Council of India/National Medical Commission. New Delhi/ SRIHER	SRIHER Centre for Health Profession Education	Ongoing since 2012
3	AERB Centre for Biodosimetry	Atomic Energy Regulatory Board, Govt. of India/ SRIHER	Dept. of Human Genetics	Ongoing since 2014
4	NIH-HAPIN Centre for Research on Health Impact of Indoor Air Pollution	National Institute of Health/Emory Univ., USA	Dept. of Environmental Health Engineering, Faculty of Public Health	Ongoing since 2016
5	NCGMA-GLP Centre for Toxicology and Experimental Research	Govt. of India/SRIHER	As common SRIHER Research Facility	Ongoing since 2012
6	Govt. of Tamil Nadu Centre for Prenatal Counseling	Govt. of Tamil Nadu/SRIHER	Dept. of Human Genetics	Ongoing since 2012
7	Govt. of India/ BCCI Centre for Sports & Exercise Sciences	Govt. of India-Sports Authority of India/BCCI/ SRIHER	As common SRIHER Research Facility	Ongoing since 2015
8	MHRD-Institution Innovation Council	Govt. of India-AICTE	Central Research Facility	Ongoing since 2017
9	BIRAC-BIONEST-Bio Incubator	Govt. of India/DBT-BIRAC	Central Research Facility	Ongoing since 2019
10	Sri Ramachandra Innovation Incubation Centre	SRIHER	Central Research Facility- to be enhanced into Medical Sciences-Technology Park.	Ongoing since 2012
11	SRIHER Centre for Indian Systems of Medicine & Quality Standardization	SRIHER	Central Research Facility	Ongoing since 2012
12	SRIHER-Centre for Regenerative medicine and Stem Cell Research	SRIHER	Central Research Facility	Ongoing since 2012
13	SRIHER-Centre for Preclinical & Translational Research	SRIHER	Central Research Facility	Ongoing since 2012

14	SRIHER-Centre for Clinical Trials and Research	DCGI/ICMR/ SRIHER	Central Research Facility	Ongoing since 2012
15	SRIHER-Centre for Biomedical Nanotechnology	SRIHER-DBT	Dept. of Human Genetics	Ongoing since 2012
16	SRMC-Centre for Healthcare Quality and Safety	SRIHER	Sri Ramachandra Medical Centre	Ongoing since 2012
17	SRMC-Centre for International Patients' Care	SRIHER	Sri Ramachandra Medical Centre	Ongoing since 2012
18	SRIHER-Centre for Global Collaboration	SRIHER	Sri Ramachandra Medical College & Research Institute	Ongoing since 2012
19	SRIHER-Centre for Early Caries Research Centre	SRIHER-DBT/ WELLCOME-India Alliance	Dept. of Pedodontics, Faculty of Dental Sciences	Ongoing since 2019
20	SRIHER-Centre for Imaging Sciences Research	SRIHER	Dept. of Radiology and Imaging	Ongoing since 2020
21	"Centre for Health Systems and Medical Engineering"	SRIHER	Faculty of Engineering & Technology	To start functioning from 2020
22	"International Center for Emerging Technologies (ICET)"	SRIHER/ Rochester university	Faculty of Engineering & Technology	To start functioning from 2021
23	"Institute of Diagnostic Services"	SRIHER	Dept.of Microbiology	To start functioning from 2021
24	Institute of Maternal and Child Health	SRIHER	Depts of Pediatrics, Gynecology & Obstetrics	To start functioning from 2021

6.3. New Centres of Excellence in Education, Healthcare and R&D Research at SRIHER proposed during 2021-2035

S.No.	Name of the Centre	Promoted by	Partnering unit(s)	To be established
1.	Sri Ramachandra Medical Sciences & Techno Park	SRIHER-Industry Partnership	All Schools/ Departments	2023
2	SRIHER Centre for Public Health Surveillance & and Health Information technologies	SRIHER-Emory University Collaboration	SRMC &RI and Faculty of Public Health	2023
3	Sri Ramachandra Healthovator-Accelerator	DBT-BIRAC and SRIHER	CRF and SRIIC	2024
4	FDA / DCGI Approved Clinical Research – Contract Research	SRIHER-Industry Partnership	Faculty of Clinical Research	2022

	Organisation (CRO).			
5	GLP Accredited Centre for Toxicology and Experimental Research with Large animal facility.	SRIHER-DBT-BIRAC	CEFTE	2026
6	"Industries on Campus Complex for Innovation and Invention"	Industry-Academia partnership Venture	SRIHER-CRF	2027
7	Health and Wellness City	SRIHER-AYUSH	SRIHER-Faculty of AYUSH	2026
8	SRIHER-Skill Development and Entrepreneurship Development Centre	SRIHER-AICTE	SRIHER-CRF-SRIIC	2021
9	SRIHER-Centre for ODL/Online Education	SRIHER-UGC	SRIHER	2021
10	SRIHER-Centre for Media, Communication and VR-AR Technology	SRIHER	SRIHER	2022
11	SRIHER-Centre for Fashion & Design Technology	SRIHER	Faculty of Fashion & Design Technology(New)	2026
12	SRIHER-Centre for Architecture & Industrial Designs	SRIHER	Faculty of Architecture & Industrial Designs (NEW)	2027
13	SRIHER-Centre for Water Resources & Clean water Technology	SRIHER	Faculty of Engineering & Faculty of Public Health	2026
14	SRIHER-Centre for Cognitive Sciences and Diseases of the Elderly	SRIHER	SRIHER-Interdisciplinary Faculties	2026
15	SRIHER- Centre for Nutraceuticals and Cosmeceuticals	SRIHER	SRIHER- Science & Technology Park	2022
16	SRIHER-Centre for Environmental Mutagens and carcinogenesis	SRIHER	Faculty of Public Health	2031
17	SRIHER-Centre for Alternate Systems of Energy and Transports	SRIHER	Faculties of Engineering and Public Health	2032
18	SRIHER-Centre for Unmanned Vehicles &Automobile Technology	SRIHER	Faculty of Engineering & Technology	2036
19	SRIHER-Centre for Defense Sciences & Technology	SRIHER	Faculty of Defense Sciences & Technology (New)	2036
20	SRIHER-Centre for Space Sciences & Technology	SRIHER	Faculty of Space Sciences & Technology (New)	2036

6.4. Faculty Recruitment Policy and Plan:

Current faculty available and the requirement as per the UGC norms is given in the table below. The Faculty: Student ratio is currently 1:9.9 which would get faculty talent with the ratio of 1:7.0 by 2040

Milestones	Current -(2020-21)	5-years (2021-25)	10-years (2026-30)	15-years (2031-35)	20-years (2036-40)
Faculties/Schools	12	22	26	28	30
Teaching Programmes	138	200	240	275	300
Projected number of students	7,188	14,100	21,450	30,590	36,750
Projected total Teachers	729	1566	2523	3823	5250
Teacher to Student Ratio	1: 9.9	1:9.0	1:8.5	1:8.0	1:7.0
Centres of Focused Health care, Research & Development & HPE	21	32	39	41	43

6.5. DESIGN OF A MULTIDIMENSIONAL RESEARCH & INNOVATION ECOSYSTEM TO NURTURE ACADEMIA INDUSTRY COLLABORATION:

SRIHER already has over 18 international university collaborations for research and teaching. We intend to increase this to over 50 during the 15-year period.

Some of the potential collaborations we intend to forge are given below.

1. Both academic and managerial Leadership of the universities should plan with a practical research and development vision and strategy that is capable of responding to new opportunities and **challenges**
2. Recognition and nurturing of the right faculty and other scientists to encourage and use their creativity and innovativeness to the fullest in the **university departments**.
3. Curricula for educational and training programs to be developed jointly by academia and industry and also offered jointly in an integrated methodology of student learning both at the academic institution and at the industry settings. Only then 'industry-ready' employable manpower **can be generated**.
4. Protected faculty time for research and/or **dedicated research-faculty**.
5. Reward for good research and development performance as evidenced by patents and other IPRs.
6. Time-line based Innovative and facilitative **Research Governance**.
7. Quality Ph.D and Post-Doctoral candidates with industry work-integrated collaboration in cutting-edge R&D programmes on pre-identified institutional thrust areas.
8. Easy access to quality technology platforms, discipline and thrust area-related research infrastructure through collaboration and **cooperation**

9. Brand value of the institution to attract research interested faculty and post-doctoral students and **industry partners**.
10. Hassle free research training and capability enhancement possibilities at all levels of the faculty to understand and adopt industry expectation for time-bound deliverables as **institutional culture**.
11. A walk-in ambience for industries in academic institutions to forge collaboration, without any institutional restriction in approvals for teaching and R&D programs with industries; A similar complementarities by industry partners are **equally important**
12. Mentorship for successful Academia-Industry **partnerships**

6.6. INITIATIVES TO ATTRACT AND RETAIN TALENTED FACULTY AS WELL AS DEVELOP JUNIOR FACULTY:

6.6.1. Career Support:

- Development of opportunities for upwardly mobile faculty and staff seeking advancement and promotion
- Assistance to faculty who may have plateaued in their career development
- Financial loan-assistance and bulk-buying opportunities for faculty wishing to purchase/renew their personal IT devices including laptop, printer, router, mobile, etc.
- Faculty mentorship programs for research and for teaching
- Initiation of a mechanism for faculty to provide input/ideas/suggestions on methods for reconfiguring university supports to better foster staff professional development
- Initiatives to encourage and assist faculty and staff to further their career advancement: Subsidized continuing education, tuition assistance program, workshops, manager training, executive education fellowships, and leadership development programs. For example, faculty members can pursue doctoral degrees at premier institutes in India with payment of salary during their study leave.
- Advanced training of recruited entry/middle level medical and research personnel in partner foreign institutions of SRU in the US, UK and Europe.
- Career support to help faculty balance teaching, research and clinical practice with other responsibilities both at work and in their personal lives.
- Financial assistance for attending national/international professional conferences, support to meet the cost of publication of research papers, filing patents, software-access, purchase of data-sets for research, etc.
- Governance, Appointment and Promotion Handbook, so faculty can locate information easily.
- Initiation of a program for the development of 'Women Leaders in Higher Education'
- Development of a robust Human Resources Office to include an on-campus Ombudsperson to assist in trouble-shooting and resolving workplace disputes and the provision of confidential input on workplace problem resolution, and access to advice on ethics, pluralism, inclusivity, equity and justice in the workplace and beyond
- A regularly initiated audit of library resources (including online holdings) to ensure that the available supports for both existing and newly developed Schools of the university are adequate, current, and reflect best practices in each academic discipline
- A strengthening of on-campus WiFi capacity across all relevant locations for both existing and new Schools of the university

- The facilitation of a ‘Big Ideas’ future-focused discussion group to explore modern teaching and learning paradigms (with a report-back to colleagues and the university administration). For example, methodologies to engage learners in education that is more experiential, holistic, integrated, inquiry-driven, discovery-oriented, learner-centered, discussion-based, and flexible. Other explorations to include: How to promote creativity, critical-thinking, problem-solving, and develop appropriate workplace dispositions, etc.

6.6.2. Personal Support:

- Availability of medical benefits including maternity benefits; dependent benefits; insurance; and retirement plans
- Post-retirement medical benefits for employees and their spouse at a nominal premium
- Assistance and accommodations for staff with childcare and elder-care needs, and for dependents with disabilities
- Access to Wellness Initiatives; for example, gyms, weight modification and nutritional guidance, meditation and yoga therapies, recreational sports programmes for employees (either on campus or through discounted memberships)
- Paid time-off to meet personal needs, and flexible work arrangements when necessary
- Housing and transportation assistance
- Reimbursement of staff children’s educational expenses to support the basic education of employees’ school-aged children
- Partial scholarships for the children of staff who earn competitive admission as students to SRIHER
- Employee assistance program including mental health support and referral, legal and financial advice, workplace concerns, counsellor support for addiction and grief counselling
- Employee discounts & perks: e.g., discounted tickets for cultural events, sports etc.
- Transportation from a selection of residential areas to/from the SRIHER workplace
- A review and reformulation of on-campus parking opportunities for staff with priority for those who have mobility limitations, evening shifts, and temporary needs for ‘close-in’ parking
- A review and where necessary an upgrading of the security and safety protocols at publicly-accessible entry points to the university grounds

6.6.3. Other Initiatives:

- Faculty and staff recognition program for outstanding workplace achievements, employment longevity recognition, ‘colleague recognition’ opportunities for superior mentorship, etc.
- Brief, episodic ‘skills advancement’ in technology as they occur; for example, technological advances such as the analytical power in data science (e.g., big data exploration, machine learning, and artificial intelligence)
- Interactive practical training workshops on conflict resolution and negotiation skills, exit strategies and effective mentoring
- Development of programs for selected retired faculty to allow for continuing contribution to the mission of the university
- “Gender Sensitization” training program

- For foreign faculty: Support with immigration/visa, relocation support and support for dependents
- Cultural programs to honor the diversity of heritage in the region and across India, and the appreciation of current and ancient Indian Arts

6.6.4. Proposal to recruit faculty from industry, Government, non-profit organizations, etc., including foreign faculty:

SRIHER shall recruit senior industry members as faculty as part of its efforts to build collaborations with partners in industry, NGO, think-tanks, and regulatory and governmental entities, etc. One contemplated arrangement shall be to recruit industry faculty for a fixed term of between 1-3 years. Faculty may also be sourced from the retired pool of employees from such organizations. Other avenues like visiting status, guest lectures and mentorship will also be explored.

7.0. PLAN TO PROVIDE SCHOLARSHIP TO MERITORIOUS INDIAN AND FOREIGN STUDENTS

Endowments have been instituted for the award of scholarships and fellowships to meritorious/needful students in the university.

- I. Founder--Chancellor Merit-cum-means Scholarship scheme for undergraduate students in all Schools will be awarded to meritorious students meeting the qualifications for the scholarship.
- II. Founder--Chancellor Fellowships are awarded to meritorious scholars undergoing the Ph.D. programme on a full-time basis.
- III. Nursing staff selected to undergo the B.Sc. (Nursing Post Basic) course and M.Sc. Nursing course are provided a 50% tuition fee waiver, besides monthly stipend, for the duration of their course.

Other initiatives being pursued to provide assistance are given below:

7.1. SCHOLARSHIP PLAN FOR INDIAN STUDENTS:

- Several full and partial scholarships.
- Opportunities for on-campus employment, such as research assistantships and teaching fellowships.
- Some funding opportunities may be sponsored by the industry partners.

7.2. SCHOLARSHIP PLAN FOR FOREIGN STUDENTS:

- Opportunities for on-campus employment, such as research assistantships and teaching fellowships.
- Foreign students will also be encouraged to seek funding from their government, philanthropic organizations and other external sources. The Financial Aid Office will provide a database of scholarships and fellowships.

8.0. Defining the Academic Curriculum: Priorities for SRIHER during the Final Decade of VISION-2040

There is particular challenge in determining appropriate practices for educating high quality medical and healthcare providers when looking far into the future, specifically for the phase, 2030-40. The future is unknowable in an immediate sense ~ but our knowledge of the past and present gives us both hope and provides insight. The most reliable way to predict the future is to try to better understand it to minimize surprise. And, the safest way to increase the accuracy of foresight is to anticipate what the future might bring.

For this purpose, SRIHER proposes developing a Research Thrust titled ‘Predicting Future Healthcare Needs in India’ as a standing responsibility assigned to the university’s Dean of Research for the entire timeframe of VISION-2040.

8.1. Approach and Deliverables

The means for effecting appropriate research into India’s future healthcare needs, and the subsequent dissemination of the results from such intellectual conversation and activities will be determined at the faculty consensus achieved by the SRIHER Dean of Research under the coordination of the university Vice Chancellor.

It is proposed that the SRIHER Vice Chancellor will, in the Interim Report to the Board of Management due at the end of the initial year of implementation of VISION-2040, outline an Investigative Plan for the years 2021-25 (that is, the Investigative Plan for 2021-25 is due to the BoM by the end of the first quarter of 2022). The foci and means for future investigations might include but are not limited to: A national conference addressing the topic; meta-analytic investigation of existing reports and policy considerations forecasting India’s future healthcare needs; custom-designed studies to investigate disease conditions endemic in India; a pilot survey of predictions by policy-influencers; and consultant-partnership with policymakers, etc.

It is further anticipated that in the first full Five-Year Report (described as a substantial deliverable to the university’s Board of Management later in this document), the Vice Chancellor will provide summary predictions about India’s most pressing healthcare needs ten-years hence. The Director (Quality) will provide responses from each of SRIHER School’s Principals on how academic responses to those needs will be incorporated into each School’s curriculum. Thus, in the Report due at the completion of 2025, the Vice Chancellor will summarize data collected and interpreted as an analysis that speculates on India’s healthcare needs for the year 2035 and beyond. It will also describe how that information will be used to update the educational offerings of the university going forward. Similarly, the Vice Chancellor will explain to the Board of Management how similar data collected during 2025-30 anticipates healthcare needs in the year 2040.

8.2. Influences on the Ability of the University to Prepare Personnel Responsive to Future Healthcare Needs in India:

Societal forces that will either limit or will facilitate the development of appropriate medical/healthcare infrastructures in the future, and particularly during 2030-40, will require a renewed look at health systems support, core functions & system attributes. These factors include:

1. Healthcare Systems Support Mechanisms
2. The Availability and Educational Sophistication of a Professional Workforce
3. A Developed Technical and Technological Assistance Structure

It is difficult to speculate far into the future. However, it is clear that the lack-of-availability of investment in the three features mentioned immediately above could delimit even the best laid plans for SRIHER’s preparation and responsivity for the future.

Specifically, the University will need to be attentive to, or seek to establish, the three factors mentioned immediately above so as to allow for responsive internal change to reflect India's fast-changing education and healthcare landscape.

8.3. Health Systems Support Mechanisms

- i. A higher education governance structure that grants the university an ability to nimbly respond to societal forces by allowing for adding/subtracting/modifying academic and practical training that reflects and responds to India's changing health needs.
- ii. SRIHER does not exist in healthcare vacuum. It must be able to deftly coordinate with other sectors and health programs and resources. Exiting partnerships and alliances must remain dynamic and receptive to circumstances that become changed in either the university or the partner, in addition to the changing healthcare needs of society. Thus, partnerships should be allowed to be changed as needs determine.
- iii. Adequate resources to enable responsive growth are vital. Such resources include but are not limited to financial, human, logistics, and equipment assets.
- iv. Sensitive and responsive leadership at the university, district, state and national levels will determine whether the nation's changed needs can be addressed without delay by SRIHER.
- v. Regulatory frameworks that are not unnecessarily restrictive will determine the degree to which healthcare quality is either ahead of, or which trails, the healthcare needs of India.

8.4. The Availability and Educational Sophistication of the Workforce

- i. For SRIHER to maintain a leadership position in healthcare professional education, the university must maintain its flexibility and have access to necessary resources to attract and retain India's future healthcare providers. Not only must the university select on the basis of natural ability and appropriate disposition for their positions, it must also ensure inclusivity by reflecting in those admitted for medical/healthcare training the diversity evident in the citizenry of India. Any university that is primarily reliant upon tuition/fees for its financial support will find it impossible to reflect the nation's diversity, particularly among minority and unrepresented groups, in those students who are selected for training. Consequently, adequate supplements to the university's funding mechanism must be identified so that recruits (both as students and as faculty/staff) can reflect India's diverse population sub-groups.
- ii. The university must not simply respond to the nation's healthcare needs but must, importantly, anticipate those needs through appropriate investment in future-focused research. This will allow for circumstances where tomorrow's needs become the focus of today's professional training.
- iii. High quality students necessitate high-quality teachers, laboratory staff, supervisors, mentors, experiential-tutors and administrators. Continuing professional development for the instructional and supervisory staff will be crucial to ensure that high-quality, contemporary learning does not experience a drop-off in relevance as staff age in the system. Members of the instructional faculty will require pre-service (for those newly-hired) and

- orientation (for those already in position) to prepare them for their future-focused training responsibilities.
- iv. The substantial investment in developing the accrued knowledge of the university's personnel requires that trained staff be retained. Skilled instructional staff who 'keep up with the times' are subject to competitive recruitment by other universities, clinics and hospitals ~ and therefore must be incentivized so that they retain a primary loyalty to SRIHER throughout their productive, working career. Nonetheless, if the university's training options are to keep pace with changes in India's healthcare needs, then flexibility in hiring and retention are important for maintaining relevancy and currency among the instructional staff. Similarly, should it ever be determined that academic programs are no longer relevant to future times, then the university must be able to 'sunset' those programs.

8.5. A Developed Technical and Technological Assistance Structure

- i. Equipment commensurate with contemporary needs is an absolute requirement. High quality training and research requires a high-quality physical infrastructure in addition to a faculty who are skilled and knowledgeable about new approaches. If SRIHER trained personnel are to carry cutting-edge information and procedures to the communities they serve post-graduation, they require a modern professional education with up-to-date laboratories, IT, and information sharing and communication systems.
- ii. Standard Operation Procedures consistent with needs as yet unfathomable because they are far into the future will need to be developed. Similarly, analytical systems and reporting formats will need to be established consistent with the medical/healthcare advances of the times.

9.0 SRIHER GOOD GOVERNANCE-TOWARDS TOTAL QUALITY MANAGEMENT:

Higher educational institutions and Universities have always projected academic excellence and high quality as the highest goals. Achieving these goals was easier in a time of favorable demographics and freedom of management. The environment has changed now warranting improvement of higher education management which is directly proportional to improvement of quality in higher educational institutions. SRIHER is also placed under such environment and circumstances. Hence SRIHER is committed to evolve "Good Governance" as a "Quality movement" based on a set of quality principles to achieve "Total Quality Management (TQM) in SRIHER". These quality principles are an institutional philosophy and organizational culture that utilizes scientific outcomes measurement, systematic management techniques, and collaboration to achieve the Vision, Mission and Goals of our Deemed to be university.

The following are the major quality principles emerged in the TQM practices of International Universities and are planned to be adopted by SRIHER for bringing about excellence in the higher education system:

- Vision and Mission linked to the driven outcomes;
- Leadership to create quality culture;
- Leadership tiers for effectively supporting quality culture;
- Systems development in administration;
- Systematic individual development among the members of the University community, viz., faculty, staff and students;
- Decision to be made based on facts;
- Delegation of decision making powers;
- Intra and Inter Institutional collaboration;
- Planning, Preparation and receptivity for change(s).

Most institutions have missions, but are not accustomed to measuring the outcomes of their processes. Traditionally, constituents within the higher educational institutions act independently rather than interdependently. Leaders are seldom trained in the tools and techniques used to improve systems and processes. Developing management skills and knowledge is not the norm in higher education management in the present Indian universities. Although data are collected for a variety of purposes for directing higher educational institutions, they are not collatable, since they are rarely collected systematically before making academic and administrative decisions. SRIHER shall make paradigm changes in “Good Governance” through appropriate Expert Committee to usher in academic, administrative and financial reforms based on the above TQM principles through actual intra-institutional collaboration and working culture as teams so as to achieve the deliverables projected in this VISION-2040 Document.

Usually, when policy changes and paradigm shifts, members begin to ask different questions in search of new answers to the same old issues. For this culture to change, SRIHER through the management, deemed to be university leaders and leadership tiers in administration, finance and human resources shall shift their planning and implementing strategies based on how work is done in international universities. They will embrace change as a positive value in the cultural milieu of the institution, as continuous improvement is based on continuous change. Since planning and implementation of academic changes, schemes etc., is an attribute to be cultivated as a culture not only by the SRIHER-Vice-Chancellors in succession, but also by the leadership tiers of the institution for supporting systems development in administration and systematic individual development among the members of SRIHER family. Only when such a holistic implementation of quality principles is effected, academic excellence in all spheres of higher education system becomes sustainable in SRIHER as envisaged in the VISION-

2040 document, christening her as “Temple of Wisdom” for holistic and multidisciplinary higher education in India.

10.0. Plan for the Future Review, Audit & Amendment of VISION 2040, in the context of possible constraints in the areas of Financial resource generation, National Educational Policy Changes and Global demands in Educational Excellence ordained for World Ranking.

Normally in the western countries, the strategic plans are limited to five years, even though every university might have long term aspirational Vision. The understandable reasons are the changing organizational, political, economic, social and technological factors within the country and world over.

Vision 2040 of SRIHER has been voluntarily developed with the larger, long-term aspiration of developing herself as role-model university as per NEP-2020 and to meet the Global ranking requirements. It is adopted by the Board of Management of SRIHER following appropriate consultations during the latter part of 2020. It is to be remembered that at this moment in time the world was experiencing what will become known in history books as the Covid-19 pandemic. There has been no equivalent experience in modern times in terms of the magnitude of death, economic recession and disruption forced upon India by the virus.

SRIHER has remained fully functional throughout this difficult interregnum; however, not without some urgent need to assess priorities and institute alternative actions to accomplish steady progress. That is, the organization has remained nimble in retooling to address changing needs. Only because the university and medical center have retained organizational flexibility has it been possible to respond efficiently and maintain clear direction and ensure high quality education and service to its constituents.

As the future is unknowable it is necessary here to acknowledge that in the approximately 15-years between the creation and acceptance of VISION 2040 and actually reaching the year 2040, events may occur that demand that these priorities, timelines and implementation strategies be revisited because of circumstances about which we can only speculate now.

Just as the Constitution of India is known as a ‘living document’ because it can be amended or changed, SRIHER Vision- 2040, too, is framed as a living document. With this understanding, there is an acceptance that the organization may need to contemplate modifications based on justified reasons in the future.

VISION 2040 has been developed to be consistent with and fully guided by the principles embedded within the National Education Policy of the Government of India, 2020. It is possible that at some time prior to 2040, the Government of India could develop a new roadmap for the nation's higher education sector, as well.

Financing higher education in India has always been challenging in the mixed milieu of governments' financial constraints to support high quality higher education and resource generation pressure on unaided private sector higher education institutions in India. The other compounding factors are:

- Industry's involvement is limited to hiring a small portion of the graduates, leaving academic institutions struggling with the placement and graduate unemployment issues;
- Very little direct financial support for higher education from industry;
- Multi-million educational endowments in India are very rare;
- Government funding for higher education is grossly inadequate;
- Research funding is very limited from Government, non-government agencies and industries;
- Almost all the higher education institutions, especially in the private sector, are tuition fee dependent and are facing severe pressures through unscientific fee-fixation norms;
- College bound students' educational directions are generally in the hands of the parents;
- The culture of autonomy and innovation in all spheres of higher education, though ingrained in NEP-2020, has several impediments from the regulatory bodies and governance systems.
- Financing higher education is a serious factor for low student – faculty ratio as well as for securing global ranking. Hence they are flagged in this VISION-2040 document as the priority requirement for all the planning factors to address how the academic processes will be financed,

Should there be national, regional or local forces at work in addition to financial exigencies between the point of adoption of VISION 2040 and the year 2040 arriving, then the SRIHER Board of Management accept that SRIHER may be permitted to make modifications to the Goals, Timelines, and Implementation Strategies for realizing VISION 2040 aspirations. This facility for flexibility will be enacted only following the endorsement of a Statement of Justification by the SRIHER Board of Management fully explaining why such flexibility is necessitated.

It is Thereby Understood:

1. That annually, calculated from the month of adoption of VISION 2040, the Vice Chancellor or his/her nominee shall present an annual report for approval to the Board of Management a brief update on

VISION 2040 implementation, highlights, and summary (to include goals-met and goals-not-met) during the immediately twelve-months.

2. That the Board of Management shall respond-and-resolve to accept for incorporation into VISION 2040, adjustments and modifications to the Timelines, End Goals and Implementation Strategies, according to their interpretation of the necessity for such actions. Every change-order to VISION 2040 shall be accompanied by a Statement of Justification that explains why such modifications are deemed appropriate.
 3. That within three-months of the fifth- and tenth-year anniversaries of the adoption of VISION 2040, SRIHER with the approval of the Board of Management shall, following appropriate consultation with constituencies of the university and medical Centre(s) and with alliance partners, publish a Report summarizing and updating progress toward meeting VISION 2040 standards.
 4. That in the first quarter of 2041, SRIHER with the approval of the Board of Management shall publish a comprehensive report on the Global positioning of SRIHER in higher education ranking, detailing, auditing, and summarizing the organization's progress in meeting the terms of VISION 2040, as duly amended.
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Atomic Energy Regulatory Board (AERB)
accredited Biodosimetry laboratory



GLP accredited Centre for Toxicology and
Developmental Research (CEFTE)
by NCGMA, Govt. of India



NABL accredited Sri Ramachandra
Laboratory Services



ISO 9001:2015 certified
Departments/IQAC/CRF



NBA accredited Pharmacy
(UG) Program



SRIIC-BioNEST,
BIRAC/DBT
Govt. of India



SRIHER-ICMR Centre for Advance
Research on Air Quality,
Climate Change and Public Health



WHO Collaborating
Centre for Research and
Training in Occupational and
Environmental Health



Hull University Teaching Hospitals NHS Trust,
United Kingdom



Sports Authority of India &
Centre for Sports Sciences



SRIHER-SASSRC partnership
with BCCI



MCI Nodal Centre to conduct
Basic and Advance Course Workshops in
Medical Education Technologies



University of Glasgow,
Scotland,
United Kingdom



THE UNIVERSITY
of NORTH CAROLINA
at CHAPEL HILL

University of North Carolina at Chapel Hill,
USA



Transforming Faces Worldwide (TFW),
Toronto, Ontario, Canada



Alliance with University of Wisconsin
to promote Nursing Education



EMORY
UNIVERSITY

NIH - HAPIN Collaboration
with Emory University, USA