Trinity University of Asia
Cathedral Heights, Quezon City

University Research Agenda
(2022-2026)

In the pursuit of its vision, "A premier Christian University in Asia and the Pacific transforming a community of learners as leaders towards a humane society" Trinity University of Asia recognized research as crucial in generating knowledge and carrying out practices aimed to improve the quality of life; inculcation of social values; protect the vulnerable; and respond to the foreseen and unforeseen needs of the national and international community.

Vision: A responsive and dynamic research culture grounded on Christian ideals and is geared towards addressing threats to humanity; tackling the challenges brought about emerging technologies and sustaining the daily needs of society.

Mission: Adopt a holistic approach in the discovery of new knowledge and innovations that are anchored on the following elements: Christian-based, development-minded, innovative, multidisciplinary and Filipino in character yet global in perspective.

The University is committed to conduct a wide-spectrum of research from basic to applied aimed to provide solutions to the complex problems of today's society.

Research Principles:

- ☐ The University shall promote a research-driven environment replete with support and resources.
- ☐ The University shall ensure that its constituent shall have the capabilities to conduct research that demonstrates rigor as a result of a comprehensive review process by experts.
- ☐ The University shall ensure that researches generated by the TUA constituents can be published in high quality peer-reviewed journals and exhibit the highest degree of integrity and fairness.
- ☐ The University shall ensure that research outputs are disseminated and utilized in accordance with the needs and challenges of society
- ☐ The University shall ensure that the research generated bolster instruction, community extension and University branding
- ☐ The University shall make certain that the researches shall observe ethical standards in the treatment of human and animal participants.
- ☐ The University shall ensure that the creation of TUA constituents in any form or modality shall be protected

Research Agenda:

1. To conduct basic and applied research studies that are directed to the improvement of the quality of life and survival of humanity
2. To provide an avenue for sustainable partnership between the community and the academe in tackling major societal challenges
3. To conduct research that responds to national and international development goals.
4. To spearhead research that will promote the mission of the University which is the formation of integrally-developed, competent and socially responsible citizen
5. To generate high quality research ready for publication in reputable journals
6. To equip the TUA community with the skills, knowledge, and resources that will motivate the TUA community to create relevant and contemporary research
7. To ensure that student research studies are relevant, discipline-based, ethical, logical and replicable. The research projects are disseminated and utilized in a credible venue.
8. To generate policy research
9. To conduct research that is aligned with the national research agenda such as the National Research and Development Agenda 2022-2028 and the National Unified Health Research Agenda 2023-2028
10. To generate research studies that will address the Sustainable Development Goals
11. To integrate the use of emerging technologies in research geared to enhance efficiency, broaden data collection method, improve analysis, and facilitate collaboration

The University has identified the following focal points where its human and financial resources will be of significant impact:

1. The Role of Science and Technology which covers emerging technologies such as AI, Block chain, augmented reality, and virtual reality in National Development and Human Resource Development vis-à-vis International Cooperation in Education.
2. Strengthening and promoting excellence in Basic and Higher Education
3. Exploration of indigenous organisms for natural product discovery in pharmacy practice and education, with a focus on post-marketing analysis, environmental toxicology, and digital applications.
4. Detection and characterization of clinically important microorganism
5. Innovation and Entrepreneurship
6. Sustainable Development
7. Developing a Knowledge-based Economy
8. Health and well-being
9. Promotion of global and public health
10. Technology-based entrepreneurship
11. Policy Research
12. Complexities of Social Life
13. Sustainable Emerging Media and Communication
14. Emerging technologies and their role in the practice of the professions
15. Digital technologies and health innovations

The identified focal points will be addressed by four clusters, namely: Health Cluster- Patient Care; Health Cluster: Diagnostic and Pharmaceuticals Cluster; Social Science, Humanities, Education Cluster; and Business and Technology Cluster. The focal points do not intend to delimit the research to be generated by the TUA constituents. Areas or topics deemed relevant but are not in the identified focal points may be pursued by the researchers.

These areas center on the University's established strengths as well as emerging areas of excellence, and provide themes for collaboration where the University can have impact on the societal and global challenges of this era.

General Perspectives

The following perspectives have led the University to identify the direction of the researches of the faculty, students, administrators and staff up to School Year 2025-2026:

1. The world is rapidly changing at a pace that one can no longer anticipate or predict the different changes that are taking place and the different variables that have affected these changes. Humanity now lives in a VUCADD (volatile, uncertain, complex, ambiguous, diverse, and dynamic). This means that VUCADD becomes a critical component in any undertakings as such there is a need to be equipped with the skills and knowledge that would enable everyone to achieve a Visionary, Understanding, Clear, Agile, and Digitally Diverse Futures

2. The prevalence of fake news has dire consequences not only to the economy of a community but as well as to the individual lives of each member of the community. Willful judgment based on fake news has sown fear, discrimination, and even put lives in danger.
   There is a need for people to discern the truth; to weed out facts from fiction; to advance honesty and integrity through a rigorous search of knowledge.

3. The threat of new diseases that can be catastrophic to humankind. There is need to predict what new diseases may emerge in the near future; however, COVID-19 and Mpox showed that viruses can continuously surprise humanity. New health concerns are challenges that may be faced health workers

4. The use of mobile devices and applications has become a norm or standard everyday practice. Analysts surmise an ongoing fourth industrial revolution (Cyber Physical Systems) which includes the concepts of Industry 4.0 and Education 4.0 as well as the emergence of Industry 5.0 and Education 5.0 which humanized the use of technology.

5. The prevailing problems of climate change, poverty, war, lack of food and water, poor access to health facilities have and will continue to beset humankind.

6. There has been a 360 degree turn around on the health care scenario during the pandemic and post pandemic period. New protocols on patient care were observed in compliance with the COVID-19 safeguards such as the transition from face-to-face to telehealth consultation to protect not only the patients but as well as the health care providers.

7. It is undeniable that microorganisms have a growing importance in human life and there is a need to be concerned with how these microorganisms are affecting human lives not only locally but also globally. Additionally, the recent push to professionalize microbiology has highlighted the importance of microbes.

8. The advent of AI, Quantum Computers, 5G networks , cybersecurity, augmented reality and virtual reality, blockchain and decentralized technology have shown that technology is continuously evolving as such knowledge of these developments will provide researchers tractions in fostering innovation, promote success and progress in today's technology ridden world.

Within these realities, the University has to provide solutions to alleviate the quality of life through systematic search and re-search of knowledge.

Business and Technology Cluster
[IBAM, CEIS, THS]

Research Goal:

To generate business-technology driven innovative research aimed to promote entrepreneurship and business sustainability in a rapidly changing market environment

Research Objectives:
- Conduct business research framed on the use of internet and digital technologies; describe the influence of the emerging technology on the local and global economy
- Describe the different challenges encountered by businesses during the pandemic and how these challenges were addressed
- Predict and maintain the sustainability of businesses in the pandemic, post-pandemic and future pandemic periods by using a continuity plan of action; onsite, offsite like the emergence of hotels
- Correlate how issues on cultural intelligence are crucial for businesses
- Create business models using data analytics towards digital transformation
- Promote Green Technology and Practices
- Develop technology-based Micro, Small and Medium Enterprises
- Interrelationship of good governance and social responsibility
- Promote the resiliency of the Business sectors [eg. tourism, hospitality, IT, marketing, finance among others]
- Conduct research on value proposition and growth of business

Thrust and Priorities
1. Business Research in Digital Era (Business Analytics, Industry 5.0, Education 5.0, Artificial Intelligence, SMART Tourism, Digital Technology Processing)
2. Challenges / Effects of Pandemic (Post pandemic)
3. Sustainability of MSMEs
4. International Business Language (Globalization etc.)
5. Cultural Intelligence and Economy
6. Behavior, Attitude, Motivation of Entrepreneurs and customers
7. Models for Service, Merchandizing and Manufacturing Businesses
8. Good Governance and Social Responsibility
9. Resiliency of Business focusing on areas such as value proposition and growth of business

Focus for 2025 to 2026: Business Sustainability, Innovation, and Technology
Specific Focus:

1. Digital Transformation and its Impact on Businesses
2. Sustainable Business Models in the Era of Rapid Technological Advances
3. The Role of Artificial Intelligence and other Emerging Technologies in Shaping the Future of Industries
4. Sustainability and Business Reporting
5. Global Economic Trends and Growth

6. Health Technology and Innovation
7. Nutrition and Food Security
8. Emergency and Disaster Risk Management

Social Sciences, Humanities, Education, and Sciences

[College of Arts, Sciences, and Education, THS]

Research Goal:

To investigate the influence of digital media on health communication by focusing on the role of the digital divide in shaping access to information and its implications for effective risk communication among diverse population groups.

To explore the integration of *Sikolohiyang Pilipino* (Filipino Psychology) in promoting mental health and wellness among Filipino communities.

To investigate the influence of emerging pedagogies on creating innovative teaching methods that can enhance the skills and competencies that can promote the employability of the students.

To explore the interplay between green chemistry and environmental management practices, aiming to develop sustainable strategies that minimize environmental impact, enhance resource efficiency, and promote the circular economy.

To conduct research activities that aim to 1) improve and promote cross-disciplinary approach to data analysis, 2) enhance studies on personality and behaviors, 3) advance global and public health, 4) increase access as well as improve the delivery of relevant education, 5) promote sustainable and relevant media and communication, and 6) produce research for a holistic and transformative mission.

Research Objectives

General Objectives (Applicable to all Disciplines)
- Foster a culture of innovation and entrepreneurship
- Apply data analytics to the different disciplines under this cluster for research to be more integrative and transformative.
- Carry-out research that will lead to the understanding of complex social challenges and how the community responds to these challenges.
- Identify the relevance of the different curricula under this cluster to industry as well as make a systematic analysis of the best practices in the different programs under this cluster
- Identify data which can formulate relevant, equitable and authentic public policy that address social problems that are of major public interest.
- Explore ways creating supportive communities through the empowerment of different stakeholders in the community.
- Identify techniques in developing personal skills of TUA constituents.

Specific Objectives per Discipline

Media and Communication

- To determine how health information is communicated in the digital age
- To cite the critical role of digital media
- To explore how to address the challenges posed by the digital divide to ensure that all population groups receive accurate and timely health information
- To improve health communication strategies in future crises
- Advance sustainable emerging media and communication modalities

Education

- To identify emerging pedagogies
- To assess how these pedagogical approaches influence student learning outcomes, promote critical thinking, adaptability among future teachers.
- To investigate alumni educational experiences and perceptions and how these may be enhanced towards the promotion of employability among the future teachers
- To improve the quality of teaching and learning in primary and secondary schools
- To enhance the quality and relevance of higher education program
- To generate research aimed to ensure that formulation of instructional design; development of teaching strategies; enrichment of assessment procedures; provision of learning support and improving the comprehension of students are evidence-based.
- To develop learning models that are accessible to all

Psychology

- To identify mediating factors that relate personality with academic life. Encourage students to discover and nurture their strengths.
- To explicate how culturally rooted psychology can inform better mental health practices and intervention in the Philippines
- To identify approaches to mental wellness that reflects the values, beliefs, and experiences of every Filipinos and their communities

Theology

- To integrate theologically-informed and mission-oriented research addressing contemporary and contextual challenges

Mathematics and Physical Sciences

- To identify the fundamental principles of green chemistry, focusing on reducing hazards, minimizing waste, and using renewable resources in chemical processes
- To explore environmental management frameworks and practices
- To integrate principles of green chemistry with environmental management practices

Research Thrust and Priorities*

- Health Communication
- Digital Media
- Digital Divide
- Risk Communication
- Miscommunication

- Mental health and wellness
- *Sikolohiyang Pilipino*
- Emerging pedagogies
- Alumni Employability
- Green Chemistry
- Environmental Management

For SY 2024 to 2025 but is deemed to be applicable for SY 2025-2026

Quality of teaching in basic and higher education

Role of Science and Technology in Human Lives

Cross-discipline Data Analysis

Personality and Behavior

Promotion of Global and Public Health

Accessible and relevant education

Pertinent Intensive English Curriculum

Advancing Mathematical and Scientific Knowledge through Interdisciplinary Research and Education

Significant and accessible education

Student Mental Health Intervention, Employability Studies and Online Misinformation

Sacred Scriptures

Ecclesiastical History

Christian Ministry

Christian Worship

Christian Doctrines

Communication for Sustainability and Social Change

Emerging Media and Artificial Intelligence

Social Media and Media Ethics

Media Constructivism and Politics

* Specific Focus for 2025-2026

Health Cluster: Patient Care

[SLCN; CAHS – Radiologic Technology and Respiratory Therapy, THS]

Research Goals

Aligned with Trinity University of Asia's vision, mission and core values; the NUHRA 2023–2028 priority areas, themes and subthemes; and the country's Universal Health Care objectives, the research program in the **Patient Care Cluster** aims to:

1. Strengthen research capacity to generate globally relevant, ethically grounded, and technologically advanced evidence for clinical practice, public health, and health sciences education, in collaboration with healthcare institutions, communities, and policy stakeholders.

2. Advance the competence and responsiveness of healthcare providers by conducting research that addresses the NUHRA's thematic areas—such as responsive health systems, communicable and non-communicable diseases, environmental health, mental health, and health innovations—to ensure equitable, efficient, and sustainable healthcare delivery.

3. Contribute to the improvement of patient care and the enrichment of client experiences through interdisciplinary studies that integrate socio-cultural, economic, behavioral, and environmental determinants of health within the Filipino context.

4. Forecast and respond to health trends, issues, and global initiatives by producing forward-looking research that informs healthcare policy, system reforms, and strategic planning in support of the Universal Health Care mandate.

5. Promote evidence-based policymaking and innovation through the development and application of advanced health research tools, including artificial intelligence, digital health solutions, and other emerging information and communication technologies.

Research Objectives

To achieve these goals, the **Patient Care Cluster** shall pursue the following objectives:

1. Enhance research competencies of faculty, researchers, and students through advanced training in research methodologies, study designs, and ethical conduct of research.

2. Develop research leadership by training faculty and senior researchers to serve effectively as project leaders, principal investigators, and research mentors/advisers.

3. Achieve full faculty engagement in the research process, ensuring 100% participation in institutional and collaborative research writeshops, from conceptualization to dissemination.

4. Cultivate a research-conducive environment that encourages innovation, interdisciplinary collaboration, and translation of findings into practice and policy.

5. Institutionalize a health science research consortium within and beyond Trinity University of Asia to foster multi-sectoral collaborations, knowledge sharing, and alignment with national and international health research priorities.

Thrusts & Priorities

1. **Artificial Intelligence and Technological Advancements for Patient Care**
   Develop and integrate AI, automation, and advanced technologies in clinical workflows and diagnostics to elevate care delivery across nursing, respiratory, and radiologic disciplines.

2. **Digital Learning Platforms and Outcomes in Health Science Education**
   Evaluate and optimize online and blended learning tools to improve knowledge retention, professional development, and clinical performance. Redesign learning and competency-building strategies—including simulation, augmented reality, and virtual scenarios—to enhance clinical readiness and adaptability in health professions.

3. **Innovative Models of Clinical Preceptorship and Related Learning Experience**
   Create and pilot new mentorship and supervisory frameworks—leveraging technology and reflective learning—to refine clinical training in diverse care environments.

4. **Healthy Workplace and Well-Being of Health Professionals**
   Investigate issues such as moral distress, burnout, and mindfulness; promote holistic well-being, ethical resilience, and gender-sensitive support among practitioners.

5. **Strengthen Health Systems and Standards of Care for Effective Patient Care**
   Analyze systemic factors affecting equitable and efficient care, from institutional processes to workforce deployment and adapt international best practices to elevate clinical standards across nursing, respiratory, and radiologic settings.

6. **Health Information Management and Social Media Engagement**
   Explore the role of digital platforms and social media in patient education, professional communication, and public health messaging. Develop secure systems for managing, archiving, and safeguarding medical and educational data.

7. **Transcultural and Inclusive Healthcare Practices**
   Study and integrate diverse health beliefs, practices, and cultural nuances to deliver respectful, gender-sensitive, and patient-centered care.

8. **Care for the Aging Population**
   Focus on geriatric care models, functional rehabilitation, and management of chronic conditions affecting older adults in all three disciplines.

9. **Telehealth, Telemedicine, and Telerehabilitation Modalities**
   Advance remote care approaches—including telemedicine, teleradiography, and telerehabilitation—to increase access and continuity of care for diverse patient groups.

10. **Emerging Health Issues: Sleep Health, Gender Sensitive Care and HIV Awareness**
    Address sleep-related disorders, gender sensitive care and promote HIV awareness, prevention, and inclusive clinical practices in the allied health professions.

Focus Areas (AY 2025–2026)

These are the general areas based on the thrusts and priorities focused on **Healthcare and Patient Care**, applied to **Nursing, Respiratory Therapy, and Radiologic Technology**, with consideration for broader care imperatives.

1. **Safe, Quality, and Collaborative Patient-Centered Care**
   Enhancing safety protocols, reducing medical errors, and promoting evidence-based best practices in clinical settings. Improving patient education, shared decision-making, and interdisciplinary collaboration in patient care delivery. Developing and implementing effective infection control measures in hospital and community settings.

2. **Healthy Work Environment in Healthcare, Education and Community Settings**
   Promoting occupational health, reducing burnout, and ensuring supportive, safe, and inclusive workspaces for healthcare professionals across all settings.

3. **Chronic Disease Management and Rehabilitation**
   Improving care pathways and rehabilitation programs for patients with long-term respiratory, cardiac, neurological, or musculoskeletal conditions.

4. **Aging Population and Care of the Older Adults**
   Addressing the needs of older adults, including prevention, chronic disease care, and maintaining quality of life. Promoting the Decade of Healthy Ageing that focuses on changing how we think, feel and act towards ageing; cultivating age-friendly environments; creating integrated and responsive health care systems and services; and ensuring access to long-term care for older adults.

5. **Climate Change, Disaster Preparedness and Emergency Response in Healthcare**
   Strengthening the capacity of healthcare systems and professionals to respond effectively to climate change, natural disasters, pandemics, and mass casualty events.

6. **Digital Health and Telemedicine in Patient Care and Therapeutic Procedures**
   Leveraging technology for remote patient monitoring, virtual consultations, and AI-assisted diagnostics. Optimizing protocols to promote nursing, radiologic and respiratory procedural safety, reduce radiation exposure, and improve respiratory therapy outcomes.

7. **Culturally Competent and Gender Sensitive Care**
   Developing evidence-based interventions for enhancing patient care outcomes integrating culturally sensitive, gender sensitive and gender-affirming care practices in patient care across disciplines and settings, including HIV awareness and education.

8. **Integrated Palliative and End-of-Life Care**
   Enhancing comfort, dignity, and family support for patients with life-limiting illnesses.

Health Cluster: Diagnostic and Pharmaceuticals

[College of Medical Technology and College of Allied Health and Sciences: Pharmacy, THS]

Research Goals:

To uncover scientific knowledge by analytically, critically, and creatively solving problems on disease diagnosis, biology, and pharmaceutics in relation to public health.

To advance human health and quality of life through the generation, dissemination, and application of new knowledge about microbial identification, biotechnology, and drug discovery with the goal of improving disease prevention, diagnosis, monitoring and treatment.

Research Objectives

- To isolate, identify, and evaluate microorganisms from clinical, environmental, and food sources, with a focus on pathogenicity and antimicrobial resistance profiling;
- To conduct research that will describe and characterize medically and industrially important microbial isolates;
- To identify and characterize human bioanalytes as potential prognostic, diagnostic, and/or therapeutic markers;
- To innovate laboratory tests or assays which will help physicians in the diagnosis, monitoring, and treatment of disease;
- To evaluate emerging diagnostic methods and their potential application in Philippine healthcare;
- To utilize molecular techniques for the detection and characterization of microbial species, antimicrobial resistance genes, and diagnostic biomarkers associated with health and disease;
- To perform ecological fieldwork and ethnobotanical/ethnomycological surveys in biodiverse regions in order to isolate, characterize, and evaluate bioactive compounds from plants and fungi with potential pharmaceutical and/or industrial applications.
- To investigate the efficacy, safety, and potential drug interactions of herbal and natural products commonly used in the Philippines to support their integration into evidence-based pharmacy practice;
- To develop and assess the impact of pharmacist-led interventions in promoting rational drug use, including the context of antimicrobial stewardship programs towards combatting antibiotic resistance in the Philippines;
- To investigate the environmental impact of pharmaceutical waste, including disposal practices, and develop strategies to minimize the ecological footprint of drug production, use, and disposal;
- To develop and evaluate the effectiveness of automation, health information systems, and digital health tools in increasing access to accurate disease diagnosis and essential medicines in urban, rural, and underserved communities in the Philippines;
- To apply analytical biology in discovering new knowledge that will advance One Health; and
- To promote the interdisciplinary approach in improving human health through interprofessional collaboration.

Thrust and Priorities
1. Microbial identification and characterization
2. Biomarker discovery and utilization
3. Innovations in laboratory medicine
4. Biotechnology in One Health Approach
5. Natural product discovery of endemic organisms
6. Pharmacy practice and education
7. Environmental Toxicology
8. Laboratory automation and digital applications

Specific Focus for 2025-2026

- Microbial identification and characterization
- Pharmacy practice and education
- Laboratory automation and digital applications