Preface:

International Journal of DeepTech in Medical Science and Technology

The launch of the *International Journal of DeepTech in Medical Science and Technology (IJD-MST)* marks an important milestone in the global academic and clinical research community. At a time when healthcare systems worldwide are experiencing unprecedented transformation through the convergence of medicine, data science, and deep technologies, this journal emerges as a timely and much-needed platform for scholarly exchange, innovation, and collaboration.

The journal is envisioned as more than a repository of research outputs; it is a strategic enabler of cross-disciplinary dialogue where medical practitioners, computer scientists, engineers, policymakers, and industry leaders converge. By curating rigorous, peer-reviewed scholarship, the journal aims to support the development of healthcare ecosystems that are data-driven, patient-centric, and secure—three pillars that define the future of sustainable healthcare delivery.

The Rationale for a DeepTech Journal in Healthcare

Healthcare is rapidly evolving into a domain where physical systems, computational intelligence, and digital infrastructure are deeply integrated. The proliferation of machine learning models, advanced sensors, telemedicine platforms, and blockchain-enabled data infrastructures is not an auxiliary development—it is redefining the very foundations of diagnostics, therapeutics, and preventive care.

While various journals already cover biomedical engineering, digital health, or clinical informatics, there has been a critical gap in addressing "DeepTech in Healthcare" as a unified discipline. Deep technologies—such as AI, deep learning, robotics, blockchain, spatial epidemiology, and cybersecurity—are no longer experimental tools but are actively shaping clinical workflows, policymaking, and patient outcomes.

The *International Journal of DeepTech in Medical Science and Technology* therefore positions itself uniquely to bridge computational advances and real-world clinical applications, with a strong focus on translational research that impacts patient care at scale.

Scope and Core Themes

Sensor-Based Health Data Acquisition, Big Data, Machine Learning, Deep Learning, Artificial Intelligence, Blockchain, Telemedicine, Remote Patient Monitoring, Cybersecurity, Robotics, Electronic Health Records (EHR), Clinical Decision Support Systems (CDSS), Interoperability, Data Science, Advanced Data Analytics, Predictive Modeling, Diagnostic Algorithms, Disease Prediction, Sensor Data Analysis, Spatial Epidemiology, Cognitive Analysis, Privacy Regulations (HIPAA, GDPR), Healthcare Ethics, Cybersecurity Policies, Remote Patient Monitoring Regulations, Policy Frameworks for Telemedicine, AI in Healthcare Governance, Data Privacy and Security

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The journal covers a wide range of intersecting domains, each representing a cornerstone of modern healthcare transformation

1. **Technology and Infrastructure**
    - Advancements in AI, machine learning, deep learning, blockchain, robotics, and sensor-based health data acquisition.
    - Deployment of cybersecure architectures to ensure data integrity and protect patient privacy.
2. **Informatics and Systems**
    - Development and optimization of Electronic Health Records (EHR), Clinical Decision Support Systems (CDSS), and interoperability frameworks.
    - Applications of big data and advanced data analytics in predictive and precision medicine.
3. **Diagnostics and Predictive Medicine**
    - AI-driven diagnostic algorithms and disease modeling.
    - Utilization of sensor data and spatial epidemiology in disease surveillance, early detection, and pandemic control.
4. **Policy, Ethics, and Governance**
    - Examination of regulatory landscapes such as HIPAA, GDPR, and emerging AI governance models.
    - Contributions on healthcare ethics, cybersecurity policies, and telemedicine regulations to align technological progress with societal values.

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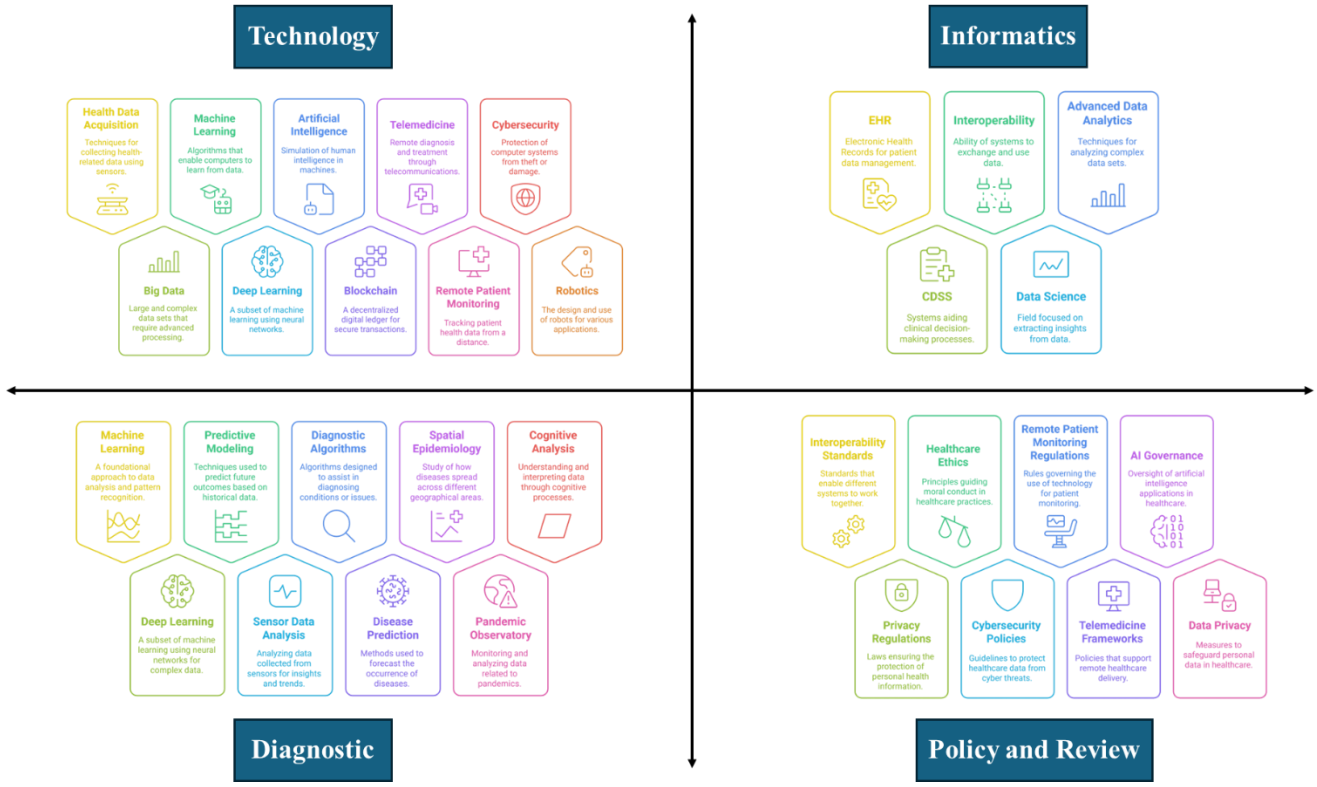
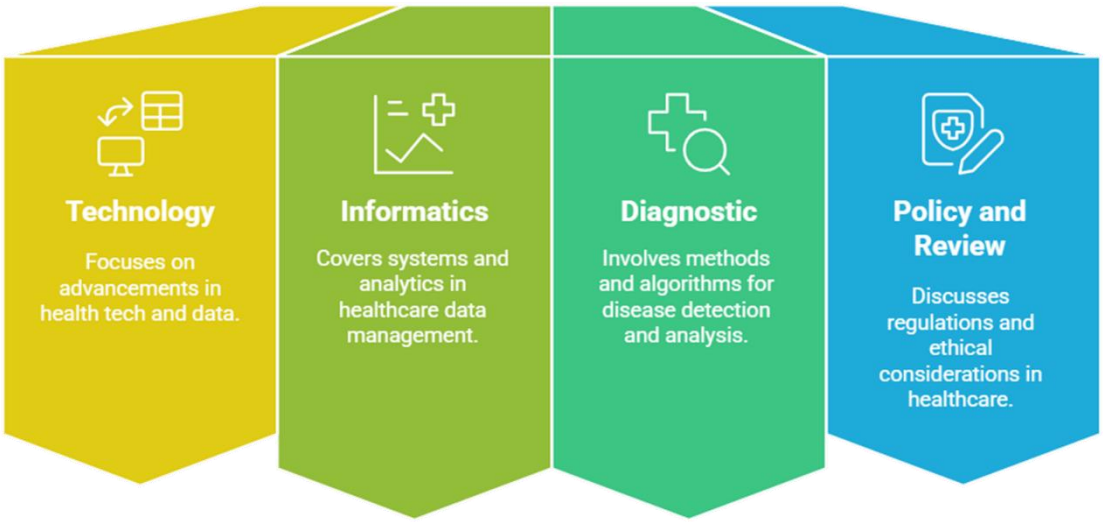


Through this multifaceted scope, the journal not only highlights innovation but also critically examines the implications of technology adoption in diverse healthcare contexts—ranging from highly digitized urban hospitals to underserved rural communities.



Our Vision and Mission in Action

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The journal's vision is clear: to become a leading global platform for pioneering research in deep technology-driven medical science, with an emphasis on innovation, security, and clinical impact.

To translate this vision into practice, our mission is threefold:

1. **Advance Integration:** Support the seamless adoption of deep technologies into clinical settings, reducing the gap between laboratory prototypes and healthcare deployment.
2. **Promote Ethical Standards:** Champion cybersecurity, privacy, and ethical governance frameworks that ensure responsible AI adoption in medicine.
3. **Foster Collaboration:** Provide a collaborative space for diverse stakeholders, including clinicians, researchers, technologists, and policymakers, to collectively design the healthcare systems of tomorrow.

Why This Journal Matters Today

Several global megatrends underscore the need for a dedicated journal on deep technologies in healthcare:

- **Exponential Data Growth:** Healthcare data is projected to grow faster than data in any other industry. Making sense of this data requires deep learning, big data analytics, and advanced computational infrastructures.
- **Rise of Telemedicine and Remote Care:** Accelerated by the COVID-19 pandemic, telemedicine is now a permanent fixture of healthcare. With it comes the need for robust interoperability standards, secure patient data exchange, and governance models.
- **Cybersecurity Threats:** As healthcare becomes digitized, it also becomes vulnerable. The journal emphasizes research that fortifies the resilience of healthcare systems against cyberattacks and data breaches.
- **Ethics and Regulation:** With AI increasingly making decisions in diagnostics and treatment, ethical oversight and regulatory compliance are paramount. Our journal provides a platform to debate and shape these critical frameworks.

Editorial Ethos and Peer Review Integrity

At the heart of the journal's credibility lies its rigorous double-blind peer review process. We hold ourselves accountable to the highest academic publishing standards, ensuring that only research with methodological robustness, novelty, and clinical relevance is published.

Moreover, the journal actively encourages contributions that not only highlight success stories but also engage with challenges, failures, and limitations—because advancing medical science requires transparency and humility as much as it requires innovation.

Acknowledgment of the Editorial Leadership and Board

The launch of this journal would not have been possible without the visionary leadership, scholarly expertise, and unwavering commitment of our editorial team. It is with deep gratitude

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that we extend thanks to the distinguished members who have laid the foundation for this scholarly platform.

- **Editor-in-Chief:**

  Dr. Jackrit Suthakorn, Mahidol University, Thailand

  His leadership and foresight in robotics and medical technology have been instrumental in shaping the journal's vision. His role in integrating deep technologies into clinical practice provides both inspiration and direction for our contributors and readers.

- **Editorial Manager:**

  Dr. Rishi Jain, Geoinformatics International Co. Ltd., Thailand

  His tireless efforts in structuring the journal, curating its themes, and establishing operational workflows have transformed the vision into a tangible reality. His background in AI, health informatics, and global collaborations underscores the journal's international outlook.

- **Associate Editors:**

  Dr. Nitin Kumar Tripathi, Asian Institute of Technology, Thailand

  Dr. Ramana Vinjamuri, University of Maryland, United States

  Both have brought unique strengths to the board ranging from expertise in geoinformatics and health systems to biomedical engineering and human-machine interaction. Their inputs ensure that the journal captures the multidisciplinary essence of deep technologies in healthcare.

- **Editorial Board Members:**

  We gratefully acknowledge the contributions of our esteemed board members:

  - Prof. I.V. Muralikrishna, Andhra University, India
  - Dr. Alice B. Conant, Yale School of Public Health, United States
  - Dr. Klanarong Wongpituk, Rajamangala University of Technology Suvarnabhumi, Thailand
  - Dr. P.K. Garg, Indian Institute of Technology Roorkee, India
  - Dr. Parag Jain, Roorkee Institute of Technology, India
  - Dr. Marc Souris, International Research Development, France
  - Dr. Roheet Bhatnagar, Manipal University, Jaipur, India
  - Dr. Branesh M. Pillai, Asian Institute of Technology, Thailand

- Dr. Sushmit Tripathi, University of Maryland, United States

Their collective expertise spans continents and disciplines, offering the journal a truly global and multidisciplinary perspective. Their support ensures that our publications reflect academic rigor, clinical relevance, and technological depth.

A Call to the Global Research Community

With this inaugural issue, we invite scholars, clinicians, data scientists, and policymakers from across the globe to contribute to this pioneering initiative. By publishing with us, authors not only disseminate their research but also become part of a growing knowledge network committed to advancing secure, ethical, and transformative healthcare innovations.

Together, we aspire to position the *International Journal of DeepTech in Medical Science and Technology* as a catalyst for future healthcare breakthroughs—where innovation meets ethics, and data meets compassion.

Closing Note of Gratitude

On behalf of the editorial office, I extend heartfelt thanks to all contributors, reviewers, and the broader research community who will shape the trajectory of this journal. The journey ahead is ambitious, but with a shared vision and collective effort, we are confident that this platform will serve as a beacon for deep technology in healthcare.

We remain indebted to our Editor-in-Chief, Dr. Jackrit Suthakorn, whose guidance continues to steer this initiative with clarity and purpose, and to our editorial board, whose expertise fortifies the journal's foundation. Above all, we thank our future authors and readers—without whom this endeavour would remain incomplete.

It is with immense pride and humility that we present the *International Journal of DeepTech in Medical Science and Technology* to the global academic and medical community.