#### Day 1: 18 September 2025

#### 8:00 AM - 9:00 AM

### **Registration & Welcome Coffee**

Upon arrival, participants will check in and receive their conference materials, followed by an opportunity for informal networking.

#### 9:00 AM - 9:30 AM

#### **Opening Ceremony**

Welcoming remarks by:

- Amine Arfaoui (Chair, Institute of Sport Professions, Ibn Tofail University, Kenitra, Morocco)
- Ismail Louragli (Co-Chair, Higher Institute of Nursing and Health Techniques, Ministry of Health and Social Protection, Kenitra, Morocco) The opening ceremony will set the stage for an engaging exploration of biological and healthcare research at the intersection of cutting-edge innovations and critical health challenges.

#### 9:30 AM - 10:00 AM

# Keynote Lecture 1-1: Revolutionizing Biological and Healthcare Research for the Next Decade

This lecture will present a comprehensive review of how advances in biological sciences, genomics, and personalized healthcare are shaping the future of medical research. It will cover innovations in molecular biology, disease prevention, and therapeutic interventions, providing insights into the evolving landscape of biological health.

#### 10:00 AM - 10:30 AM

## Keynote Lecture 1-2 : The Future of Biological and Healthcare Research in the Age of AI

An overview of the current and future trends in AI's role in biological and healthcare research, highlighting interdisciplinary collaborations.

## 10:30 AM - 11:00 AM Coffee Break & Networking

#### 11:00 AM - 12:30 PM

**Session 1: Neuroscience and Brain Health: Current Challenges and Breakthroughs** This session will address key developments in neuroscience, focusing on neurological diseases and brain health. It will examine cutting-edge research in neurodegeneration, neuroplasticity, and cognitive function, and will present emerging strategies for the prevention and treatment of conditions such as Alzheimer's and Parkinson's disease.

12:30 PM - 1:30 PM Lunch Break

# 1:30 PM - 3:00 PM Session 2: Molecular Pathways in Health and Disease: Implications for Therapeutics

In this session, the focus will be on the molecular mechanisms that underlie health and disease. Experts will discuss how biochemical pathways influence cellular function and contribute to various diseases. Presentations will also cover the potential for therapeutic interventions targeting these pathways, with an emphasis on precision medicine.

#### 3:00 PM - 4:30 PM

# Session 3: Genetic Research and the Future of Personalized Healthcare

This session will delve into the revolutionary advances in genetic research that are paving the way for personalized healthcare. Topics will include the application of genetic screening, gene editing, and molecular diagnostics in the prevention, diagnosis, and treatment of genetic disorders and other health conditions.

# 4:30 PM - 5:00 PM Coffee Break & Networking

## 5:00 PM - 6:30 PM

# Panel Discussion: Bridging the Gap Between Biological Research and Public Health Policy

A panel of experts will explore how biological and healthcare research informs public health policy, with a focus on disease prevention strategies, access to healthcare, and the implementation of scientific discoveries in real-world settings. This session will address global health challenges, including equitable access to medical innovations.

# 6:30 PM - 7:00 PM

## Day 1 Closing Remarks

- Overview of the day's discussions and key insights.
- Preview of Day 2's topics and sessions.

7:00 PM - 8:30 PM Networking Reception An informal gathering where participants can continue discussions, forge professional connections, and network with colleagues and experts in the field.

#### Day 2: 19 September 2025

#### 9:00 AM - 10:00 AM

# Keynote Lecture 2: Machine Learning in Healthcare – Revolutionizing Diagnostics and Treatment Pathways

This session will showcase how machine learning is transforming healthcare by automating diagnostics, optimizing treatment plans, and predicting patient outcomes. Presentations will focus on the practical applications of AI in radiology, oncology, and personalized care, with examples of successful AI-driven interventions.

#### 10:00 AM - 11:30 AM

#### Session 4: Advancements in Neurodegenerative Disease Research: New Frontiers

This lecture will focus on the current research breakthroughs in neurodegenerative diseases. Topics will include new molecular insights, the role of biomarkers in early diagnosis, and cutting-edge therapeutic strategies. The speaker will also discuss how the latest advances are reshaping the landscape of clinical treatments and patient care.

#### 11:30 AM - 12:00 PM Coffee Break & Networking

# 12:00 PM - 1:30 PM

Session 5: Infectious Diseases: Innovations in Research and Global Health Strategies

The session will examine the latest research on infectious diseases, particularly emerging pathogens and global health responses. Discussions will include innovations in diagnostics, vaccines, and therapies, as well as global health policies aimed at controlling infectious outbreaks and improving public health systems worldwide.

# 1:30 PM - 2:30 PM Lunch Break

#### 2:30 PM - 4:00 PM

Session 6: Environmental Health and Global Challenges: A Critical Review

This session will explore the impact of environmental factors on human health, with a focus on global health challenges such as climate change, pollution, and ecological

degradation. Experts will present research on how environmental changes are influencing public health and discuss strategies for mitigating these effects.

#### 4:00 PM - 5:00 PM

#### Session 7: Integrating Research into Healthcare Systems: The Path Forward

This session will focus on how the integration of biological research into healthcare systems can improve service delivery, patient care, and clinical outcomes. Discussions will include the role of research in shaping health policies and the challenges of implementing research-driven solutions in healthcare infrastructure.

#### 5:00 PM - 5:30 PM

#### **Closing Remarks & Future Directions**

- Summary of the conference's key findings and insights.
- A discussion on future research priorities and strategies for advancing healthcare globally.

#### 5:30 PM - 6:00 PM

#### **Conference Closure**

Acknowledgments to participants, speakers, and sponsors for their contributions to the success of the conference.

#### 6:00 PM - 7:00 PM

#### **Farewell Gathering**

A final opportunity for participants to network, exchange ideas, and discuss future collaborations as the conference concludes.