



UNESCO-Merck Africa Research Summit (UNESCO-MARS)

A valuable opportunity for all those engaged and interested in health and life science research in Africa to learn about the full spectrum of ground-breaking scientific research currently underway, and prepare for the road ahead in Africa's development as an international hub for research excellence and scientific innovation.

Introduction

Since the advent of modern health treatments and early use of antibiotics, life and medical science research have been essential to the development of myriad drugs to help treat infections, manage long term or chronic illness, and prolong the life of patients.

Such research has transversal reach since it does not only contributes to society's wellbeing, it influences a nation's socioeconomic output through increasing productivity. Nonetheless, many of the diseases that afflict the world's poorest people are neglected for financial, scientific or political reasons, a market failure where the 10% of worldwide resources devoted to health research are put towards health in Developing Countries, where over 90% of all preventable deaths occurred.

Hence disparities and inequities in health remain a major development challenge in the new millennium, and malfunctioning health systems are at the heart of the problem. Countries who have the highest burden of disease are struggling with poor service delivery and infrastructure, inadequate financing, severe shortages of healthcare providers and other trained scientific researchers, and a lack of basic information on health indicators.

It has also become apparent, following the recent Ebola crises in West Africa, that there is a paucity in the health research milieu; scientific researchers do not have the capacity to provide adequate scientific solutions to problems at the local level.

In this context the **UNESCO-Merck Africa Research Summit (UNESCO-MARS)** was initiated to address in parts the vital role of research in the improvement and sustainable development of

population health with specific emphasis on how to translate knowledge into action - the 'know-do gap' - to improve health.

Moreover, it will provide a platform for dialogue on improving global cooperation on life science and health research and narrowing the disparities in health systems performance between developing and developed countries.

Since the 2004 Ministerial Summit on Health Research, the vital role of scientific research in health has been articulated in recommendations to all stakeholders, stating the importance of:

Strengthening national health research systems; supporting health policy and systems research; strengthening knowledge translation into action to improve health; and securing public confidence in science.

These recommendations have been reiterated by several organizations¹ and were the foundation for The Global Ministerial Forum on Research for Health, Bamako, Mali in 2008, where UNESCO and WHO produced a declaration on the promotion of health research in collaboration².

The declaration recognizes that:

Research and Innovation are essential not only to solve health issues but to alleviate poverty and promote sustainable development; the global research efforts should be determined by national and regional agendas and priorities; greater equality in the research expenditure is crucial to address the health challenges of the poor, marginalized, and disadvantaged; the nature of research and innovation for health improvement is not interdisciplinary; there is often misalignment between funders, governments, and other organizations; strong national commitment to science education at all levels of the education system is critical; and that funding for research for health, especially in low- and middle-income countries, is difficult to secure.

This complex environment requires the consolidation of a systems approach, which can identify the linkages between research systems, innovation systems and health systems to underpin effective inter-sectoral action; to make knowledge translation a priority for governments; to link evidence to policy-making; and to create stronger institutions for research and capacity-building³.

Subsequently, these results fed the development process of the WHO strategy on research for health⁴ which focuses on strengthening the research culture in WHO; global research on priority health needs; helping to strengthen national systems for health research; promoting good practice in research, with WHO setting norms and standards; and strengthening links between health research and health policy and practice.

¹ 2005 World Health Assembly (WHA) resolution WHA58.34, as well as at the 56th WHO Regional Committee in Addis Ababa (August 2006) and at the ministerial conferences in Abuja (March 2006) and Accra (June 2006)

² <http://www.who.int/rpc/news/BAMAKOCALLTOACTIONFinalNov24.pdf?ua=1>

³ In particular it invites UNESCO to promote research for health as an important inter-sectoral issue in capacity building and in policy advice provided to governments in education, the sciences, culture, and communication. Similarly it invites relevant private or public institutions to work through regional alliances to advocate for research, establish networks of researchers and regional centres of excellence, ensure coherent and sustainable funding, improve education and career opportunities in research and research management, and strengthen harmonization of regulation and ethical conduct.

⁴ http://www.who.int/phi/WHO_Strategy_on_research_for_health.pdf

In Africa, the issue of health research has been comprehensively covered in the Science, Technology and Innovation Strategy for Africa – 2024 (STISA-2024) which was adopted in June 2014 by the African Union.

Preceding that, the 2013 Abuja Special Summit on HIV/AIDS, Tuberculosis, and Malaria highlighted the need to utilize and build on Africa's research capacities to produce new and effective medicines, diagnostic tools, vector control tools and vaccines; and to promote research, invention and innovation in traditional medicine.

Similarly, it emphasised the urge to strengthen local health ecosystems, taking into account the socio-cultural and environmental situation of the people.

The UNESCO-Merck Africa Research Summit:

Current reviews show that a lack of Science, Technology and Innovation-STI capacity has hindered the attainment of several Millennium Development Goals. While this underlines the critical role of STI for the accomplishment of the MDGs, it also posits valuable lessons for the post-2015 development agenda.

Our work indeed shows that the role of technology and innovation is positive and critical at each and every stage of development. It is clear on close analysis that a much greater emphasis has been put on the role of technology and scientific research in implementing the new Sustainable Development Goals (SDGs).

Goal 3 of the proposed SDGs for example aims at ensuring healthy lives and promoting well-being at all ages; this can be achieved through supporting research and development of vaccines and medicines,

Goal 9 involves building resilient infrastructure, promoting inclusive and sustainable industrialization and fostering innovation, where, technology and innovation will take centre stage.

In the context of the new SDGS and taking an active role in addressing health challenges and strengthening the role of scientific research in life sciences and medical sciences for Africa, Merck and UNESCO are organizing an annual meeting, entitled the UNESCO-Merck Africa Research Summit (UNESCO-MARS).

This summit aims to bring together researchers from across Africa to discuss the generation, sharing and dissemination of research data and to prepare for the road ahead in Africa's development as an international hub for research excellence and scientific innovation, as has been faithfully articulated in STISA-2024

UNESCO-MARS will be conducted on a yearly basis which will ensure significant sustainable impact on access to high quality and innovative healthcare solutions, building research capacity and sustaining innovation across Africa.

UNESCO-MARS will entail a diverse set of speakers from academia, research institutes, major funding organizations of life/medical research, Chairs of biology and medical research councils, NGOs, industry, policy makers and editors of scientific / medical journals.

UNESCO-MARS 2015 will be scientifically supported by UNESCO, The University of Cambridge (UK), and University of Rome (Italy). **The main objectives of the 2015 summit will be the following:**

1. Build research capacity in the African (scientific) health research community with special focus on Ebola and emergent infectious diseases.
2. Showcase innovative research taking place in projects, programs and initiatives across African universities and institutes and the wider African research community.
3. Contribute to the development of a road map for enhancing policy environments and mechanisms to support life and medical sciences research translation and bridge the “Know Do” gap in Africa.
4. Discuss challenges, opportunities and proposed strategies to support health decision making in low and middle income countries.
5. Provide networking opportunities to strength the scientific community and their impact on African society and media communication, where they exchange experiences, knowledge, best practice (especially In Ebola management) and establish cooperation for future research and development projects.
6. Share knowledge and experience between multi-sectorial global and African research stakeholders including a diverse set of speakers from major funding organizations of life/medical research, research institutions, established and emergent researchers, academia, NGOs and editors of scientific/medical journals and policy makers of developed and developing countries.
7. Demonstrate state of the art in biotech manufacturing and R&D for the benefit of the African research community and other summit participants.

UNESCO-MARS 2015 will bring together up to 100 researchers to attend the summit. Abstracts are invited from final year PhD students and young investigators involved in HIV, Ebola and other infectious disease research. All should be primarily based at African research institutes and universities, collaboration within Africa as well as outside is encouraged.

The Summit’s objectives will be accomplished through sets of keynotes, panel discussions, poster sessions, field visits and workshops.

The sessions will revolve around the following themes:

- **Identifying research priorities for evolving health needs; the case for emerging infectious diseases**

The funding and implementation of scientific research is essential to health systems. However, it is necessary to prioritise research in critical areas, where the resources allocated will have maximum impact. Emerging infectious diseases (EID’s) represent an increasingly significant burden on health and sustainable development, which falls disproportionately on developing countries, infants, children and minority groups. There is an increase in emerging infectious disease, linked to ecological changes, the HIV pandemic, the prevalence of drug resistant microbes resulting from

sustained use of antimicrobial drugs, and rising international travel and commerce. The Ebola epidemic in western Africa has demonstrated that addressing this global health challenge requires both basic and applied research, as well as a focusing of scientific resources onto areas at high risk of EID events, as part of a coordinated global approach.

- **Enhancing policy environment and mechanisms to support research translation in Africa**

Effective health policy and practice should be fully informed by evidence generated through research. The successful translation of evidence to policy operates within a complex social setting that is specific and localised, and therefore requires dialogue between researchers, policy makers, the pharmaceutical industry and civil society. Research translation is contingent upon accessible, high quality research, which has been subject to ethical review, and challenges such as copyright restrictions on the use of data, the high cost of scientific articles and the lack of global standards in health informatics must still be overcome.

- **Networking Opportunities to Strengthen the Scientific Community and their Impact on African Society and Media Communication**

Addressing complex issues in a coherent manner requires partnerships between key stakeholders; a systems based approach to the health environment enables health, research, and innovation to be linked in a way which is complimentary and mutually supportive. To build public confidence in the research underpinning health systems research protocols must be both transparent and ethical, and operate within a clear, robust regulatory framework. Supporting this framework with advocacy for science and an understanding the media's role as a broker of knowledge generates trust in institutions and individual scientists, facilitating public engagement with research. A community of scientists where networking and collaboration are encouraged is fundamental to developing the intersectoral understanding needed to confront regional and global challenges in health.

- **Merck R&D and Manufacturing Site Visit and Workshops**

The visit to Merck R&D and manufacturing Vevey site provides an inside view into the environment at a centre of research excellence, as well as an opportunity to build relationships between members of the international scientific community. The workshop provides a forum for the exchange and discussion of current ideas surrounding networking in science and policy for research translation, to enhance (communication with media and society) the positive impact the research community has on civil society in Africa.