

ABSTRACTS

Stefan Germann, Fondation Botnar

Health in the Digital Age – Risks and Opportunities towards 2030

There is little doubt that digital technologies are “an essential component and an enabler of sustainable health systems and universal health coverage” (WHO Draft Strategy on Digital Health). Data-driven digitalization and the application of AI and machine learning are integral to transforming healthcare systems, health services, and medical practices and to ensuring progress towards universal access and coverage. These new technologies offer unprecedented potential, ranging from clinical decision-making support and remote health worker training, to better case management and coordination of care, efficient resource management, and improved access to services, especially for patients living in hard-to-reach areas. Moreover, as COVID-19 has taught us, digital technologies are of huge importance for disease surveillance, outbreak control and contact tracing. If we're to achieve health for all by 2030 as envisioned in the UN Sustainable Development Goals, we cannot afford to miss the opportunities these tools present.

And yet, how well we realize the digital transformation of healthcare – whether we manage to reap its benefits while doing no harm – depends on the political choices we make. The digital transformation of health systems must be governed responsibly. For digital technology to have the positive impact on health we envision, we must address underlying conditions of inequality and injustice and better protect the rights and entitlements of individuals and societies.

Lucy Setian, Novartis Foundation

Reimagining Global Health through Artificial Intelligence: A Roadmap to AI Maturity

The report “Reimagining Global Health through Artificial Intelligence: The Roadmap to AI Maturity” was developed by the Broadband Commission for Sustainable Development Working Group on Digital and AI in Health and launched at Intelligent Health. This working group was co-chaired by the Novartis Foundation and Microsoft.

Before assessing whether AI offers solutions, countries must identify the health problems they need to address. To realize the full potential of AI in health, countries must also nurture an enabling ecosystem with six interdependent pillars as part of an AI in health maturity framework: people & workforce; data & technology; governance & regulatory; design & processes; partnerships & stakeholders; and business models.

See executive summary at https://www.broadbandcommission.org/Documents/working-groups/AIinHealth_ExecutiveSummary.pdf

Christoph Pimmer, learning.lab and FHNW

From Web 2.0 to Intelligent Assistants: The Power of Digital Conversations in Global Health

In his talk, Christoph will focus on the use of conversational digital technologies including social media, web 2.0 and intelligent digital assistants in the domain of global and public health. He will outline the prevalence and relevance of mobile and social media, their benefits and opportunities as well as the risks and challenges that they bring about, and how they can be addressed. One of the key concerns is the development of professional digital literacy skills of the health workforce and of guidelines and policies to orchestrate the sensible and responsible use of these media. In his talk, Christoph will draw on many of his own innovation and research projects from across the world, with a particular focus on Sub-Saharan Africa.

Neira Budiono, TransformHealth Coalition

Reaching Young People and Breaking Stigma through Youth-led Digital Health Content

Digital spaces and content provide crucial avenues for young people to learn about their bodies and sexuality—especially since these topics are often highly stigmatized. However, care needs to be taken to ensure that meaningful youth engagement is prioritized throughout the process, and that young people's rights and well-being are safeguarded. The presentation will showcase best practices in health content for young people's SRHR, discuss human-centered design principles and methods to ensure meaningful youth engagement, and ways in which digital health solutions should safeguard young people's safety and well-being.

Cansu Canca, AI Ethics Lab

How to Design and Use Ethical Technologies for Health

Health care, public health, and health research all present a great variety of ethical questions. When health intersects with technology, these ethical questions often become even more complex. In this short talk, I will present use cases that demonstrate how some of these ethical questions arise within digital technologies for health and how we can solve them. These use cases will discuss the ethical challenges in digital contact tracing applications, risk analysis tools for patient prioritization, and AI research with human subjects respectively focusing on public health, health care, and health research.

I will conclude by showing that a proactive and effective approach to solving these ethical issues requires integrating ethics into the innovation process through a problem-solving model.