

#InnovativeSlovakia 

THURSDAY  
**October 14, 2021**

VENUE  
**Sheraton Bratislava**

+ ONLINE



# The Importance of Innovation in Slovak Health Care

BREAKING DOWN THE BARRIERS  
BETWEEN TECH AND HEALTHCARE

MAIN PARTNERS



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The COVID-19 pandemic has accelerated systemic changes that were apparent before its inception. Most urgent systemic changes are about to happen in the field of healthcare & innovation. The pandemic has raised the importance of healthcare sector and of its institutions and stakeholders accelerating and extending their innovation efforts. The healthcare sector holds a massive jolt of urgency to embrace new tools and technologies.

The AmCham conference is a pioneering the interconnection and cooperation of slovak leaders in health care and technology sector to shape the principles, policies and partnerships needed in this challenging new context. It is essential for leaders from these areas to work together for a more inclusive, cohesive and sustainable future as soon as possible in 2021.

# AGENDA

9:00 WELCOME SPEECH



**Gabriel Galgóci**, AmCham President,  
AT&T Country Manager



**Vladimír Mičieta**, Country Manager,  
Medtronic

OPENING REMARKS



**Veronika Remišová**, Deputy Prime Minister of the Slovak Republic for Investments,  
Regional Development and Informatization

OPENING REMARKS & CHAT



**Róbert Babela**, State Secretary of the Ministry of Health of the Slovak Republic  
**ZUZANA KOVAČIČ-HANZELOVÁ (MODERATOR)**

DISCUSSION



**Federico Pratellesi**,  
DG Sante, European Commission



**Ludmila Majláthová**, Representation of  
the European Commission in Slovakia

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9:45 INNOVATIVE TREATMENTS – INVESTMENTS IN “ECONOMIC” VALUE OF INNOVATIVE TREATMENTS AND MEDICAL TECHNOLOGY

CHAT



**Jasper Kunow**, Managing Director for Central Eastern Europe, MSD

PANEL DISCUSSION



**Róbert Babela**, State Secretary of the  
Ministry of Health of the Slovak Republic



**Marián Streško**, Head of the Oncology  
Clinic at the University Hospital in Trnava



**Alica Sukupová**, Director of Health  
Policy, VsZP



**Jasper Kunow**, Managing Director for  
Central Eastern Europe, MSD

10:45 COFFEE BREAK

**ZUZANA KOVAČIČ-HANZELOVÁ (MODERATOR)**

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11:00 INNOVATIVE DIAGNOSTICS OF PATIENTS TISSUE AND BLOOD SAMPLES AS ESSENTIAL PREREQUISITE FOR INNOVATIVE TREATMENTS

PRESENTATION



**Ales Ryska**, President of the European Society of Pathology

PANEL DISCUSSION



**Lukáš Plank**, Head of the Department  
of Pathology of the Comenius University  
Jessenius Medical Faculty and University  
Hospital in Martin



**Michal Konečný**, President of the  
Slovak Society of Medical Genetics



**Kamil Szaz**, State Secretary, Ministry of  
Health of the Slovak Republic



**Beata Havelková**, Vice-Chairwoman of  
the Board of Directors of VŠZP

**ZUZANA KOVAČIČ-HANZELOVÁ (MODERATOR)**

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12:00 TELEHEALTH: THE ROLE OF TELEMEDICINE DURING AND POST COVID-19 OUTBREAK

PRESENTATION / CHAT



**Lubica Kováčiková**, The National  
Institute for Cardiovascular Diseases



**Vladimír Mičieta**, Country Manager,  
Medtronic

PANEL DISCUSSION



**Robert Hatala**, Head of the Depart. of Cardi-  
ology and Angiology, Faculty of Medicine, SZU



**Vladimír Mičieta**, Country Manager,  
Medtronic



**Marian Faktor**, Director of Relations  
with Healthcare Providers, Dovera



**Lukas Palaj**, Riaditeľ, Odbor digitalizácie  
a umelej inteligencie, MZ SR

**ZUZANA KOVAČIČ-HANZELOVÁ (MODERATOR)**



**Matej Adam**, Digital health expert  
(MoH CZ, VZP CZ, NCZI SK)

13:00 LUNCH

13:45 BIOCONVERGENCE - FUTURE OF MEDICINE/ ISRAEL SUCCESS STORY

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**Karina Rubinstein**, Israel Innovation Authority representative

14:00 PATIENT JOURNEY: INNOVATIVE SOLUTIONS/CUTTING-EDGE TECHNOLOGIES

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PRESENTATIONS



**Ruthy Kaidar**, Director Health Industry Sector Central & Eastern Europe Microsoft



**Tobias Heimann**, Siemens Healthineers: AI & Software Solutions for Diagnostics

PANEL DISCUSSION



**Miriam Lapuníková**, Director, FNsP BB



**Ľuboš Iro**, Siemens Healthineers



**Štefan Korec**, Clinical Oncologist, President Onkoaliancia



**Dmitry Etin**, Solution Architect for Healthcare, Oracle

ZUZANA KOVAČÍČ-HANZELOVÁ (MODERATOR)

15:10 DIGITALIZATION, INNOVATION & MENTAL HEALTH

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PRESENTATION



**Veronika Hudzíková**, Deutsche Telekom IT Solutions Slovakia

PANEL DISCUSSION



**Viktor Svetský**, Ministry of Health of the Slovak Republic



**Zuzana Šimeková**, Founder and CEO of INLY



**Marek Madro**, Founder and Program Director, IPcko



**Marcela Havrilová**, Education Industry Lead at Microsoft CZ/SK

TOMÁŠ JUCHA, GENERAL DIRECTOR, MIRRI (MODERATOR)

16:10 THREATS TO HEALTHCARE SECURITY

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CHAT



**Fridrich Matejik**, Country Leader, IBM

PANEL DISCUSSION



**Fridrich Matejik**, Country Leader, IBM



**Dalibor Kacmar**, National Technology Officer, Microsoft

ZUZANA KOVAČÍČ-HANZELOVÁ (MODERATOR)

16:50 VALUE BASED PUBLIC PROCUREMENT

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PRESENTATION



**Bogdan Fratiloiu**, Compliance Value Lead Romania, Data Protection Officer, Roche Romania SRL

PANEL DISCUSSION



**Jaroslav Lexa**, Vice Chair, The Office for Public Procurement



**Ondrej Kuruc**, Director, Ministry of Health of the Slovak Republic



**Martin Smatana**, Healthcare analyst at MSquare, a.s & Health Fellow at Globsec



**Pavol Lepey**, Head of Healthcare Transformation & Market Access, Roche Slovensko

ZUZANA KOVAČÍČ-HANZELOVÁ (MODERATOR)

17:50 WINE & SNACK



## LUKÁŠ PLANK

Head of the Department of Pathology of Comenius University Jessenius Medical Faculty and University Hospital in Martin

## INNOVATIVE DIAGNOSTICS OF PATIENTS TISSUE AND BLOOD SAMPLES AS ESSENTIAL PREREQUISITE FOR INNOVATIVE TREATMENTS

Diagnostics of tumor tissue or cells called „biopsy“ or „cytology“ (obtained by e.g. puncture, endoscopy, surgical resection, etc.) provided by pathologists represents a *conditio sine qua non* for the „classic“ treatment of oncological patients. Traditionally, the biopsy has to confirm a diagnosis of cancer, to define its histological type and grade of malignancy and when possible also the stage of the disease, contributing to patient´s prognosis assesment.

The innovative oncological treatment - targeted (biologic) therapy of many cancers seem to improve the patient´s outcome. In principle, it blocks the „driver“ gene mutation responsible for the uncontrolled cancer growth and spread. This mutation is highly individual, even histologically identical cancers may show different driver mutations. Mutation identification in bioptically examined tissue is mandatory, as it represents a predictive factor for selection of the most effective therapy. Innovative molecular pathology diagnostics allows to diagnose this mutation either in-situ in the tissue section, or by analyses of tumor DNA and/or RNA isolated from the tissue e.g. by PCR, NGS, etc. The innovative immunotherapy encouraging the patient´s immune system to fight against the cancer requires too to identify relevant predictive factors in the biopsy specimen. Recently, also a patient´s blood sample called „liquid biopsy“ might be analyzed by using similar when not identical methods as those for tissue biopsies. This non-invasive method helps to control the effectivity of the innovative therapy by using the most effective therapeutical modalities. Nowadays also the digital pathology with support of AI starts to be useful for identification of the predictive factors for innovative therapies.

**In summary, the personalized and precise medicine brings innovative therapies based on innovative biopsy diagnostics of individual patients. The succes lies in a closed interdisciplinary team-work leading to proper tumor-board decisions and bringing benefit for oncological patients and the society.**

# INVESTMENTS IN “ECONOMIC” VALUE OF INNOVATIVE TREATMENTS AND MEDICAL TECHNOLOGY

*“Throughout 2020, while we were all fighting against the COVID-19 pandemic, many of us were fighting a silent battle. The battle against cancer. In 2020, we lost 1.3 million Europeans to this disease. And sadly, the number of cases is on the rise.”*

These stirring words from Ursula von der Leyen, European Commission President, on launching the [EU’s Beating Cancer Plan](#) in early February, are designed as a wake-up call to all in Europe, not least Central and Eastern European (CEE) countries.

Cancer is a bitter experience we all increasingly share, both personally and among family and friends. Without the help of decisive action at national and European levels, cancer deaths could rise by as much as a quarter over the next 14 years<sup>1</sup>, reversing slowing trends of cancer deaths recorded in recent years achieved often due to improved cancer care and innovative treatments.

We need to step up the battle against cancer. We should trumpet the powerful case that cancer is an urgent public health, social and economic issue that must become a political priority. We at MSD, in common with others, advocate for cancer control planning, to ensure access to quality treatment and support early diagnosis and higher rates of adequate treatment.

But we recognize that this is not enough: sustained and effective enforcement and implementation, including adequate funding, is vital. Europe’s Beating Cancer Plan aims to unlock [€4bn](#) for actions to “reduce the suffering caused by cancer.” Much of this will go to CEE countries.

EU’s Beating cancer plan seeks to help countries “turn the tide against cancer”. But, in turn, national governments should devote more of their health budgets to cancer: after all, early diagnosis alone can reduce treatment costs by up to four times compared to managing cancer patients suffering from late-stage disease or terminal illness even. This is an important finding for CEE countries where [the risk of cancer mortality](#) is considerably higher than in the west.



## JASPER KUNOW

Managing Director for Central Eastern  
Europe, MSD



**JÚLIA DVORSZKI**

Country Director at Janssen Slovakia

## INVESTMENTS IN “ECONOMIC” VALUE OF INNOVATIVE TREATMENTS AND MEDICAL TECHNOLOGY

Healthcare is a dynamic field and new treatments are being developed that have potential to save and improve the quality of lives for patients. People today are living longer, healthier, and more productive lives, thanks in part to decades of biomedical innovation. New medicines today offer real hope to patients facing even the most serious diseases.

Innovative medicines have not only medical but significant economic benefits. They provide economic value to healthcare systems and society by helping lower other medical expenditures and healthcare costs. When it comes to cancer care and access to innovative cancer treatment, the Central European region is very fragmented. Slovakia, for example has been lagging behind other European countries in cancer care for years. One indicator is the number of oncological treatments currently available to Slovak patients – only about a third of innovative oncological therapies are reimbursed in Slovakia compared to the rest of the region. Part of the solution is to make access to modern therapies a political, social, and economic priority.

According to a study conducted in 2020, investments in innovations in oncology, would reduce the mortality of oncology patients in Slovakia by up to 9% and sound investment strategy could generate 10 euros from every single euro invested in terms of productivity. If we want the modern future for oncology, then we must move from saving to a reasonable investment.

But that alone won't be enough. It is also necessary to systematically approach prevention, improve patient management and provide a holistic approach to treatment. All of us in healthcare must join forces and step up our efforts and deliver better outcomes for patients. In Janssen, we are dedicated to discovering, developing, and delivering transformational medicines that address the most serious and complex medical challenges of our time.

## THE ROLE OF TELEMEDICINE DURING AND POST COVID-19 OUTBREAK

Telemedicine is a rapidly evolving form of modern information and communication technology used to deliver clinical services and educational activities. In February, 2013, videoconferencing project was launched between a medium-volume Pediatric cardiac center in Bratislava, Slovakia and subspecialty experts from a high-volume Pediatric cardiac program at The Children's Hospital of Philadelphia (CHOP). The videoconferencing project was based on an offer of technical assistance from the US Embassy in Slovakia. The technical equipment allowed transfer of high quality echocardiographic, angiographic, computed tomography, and magnetic resonance data for videoconferencing. The main goal of the project was consultation on individual patients to obtain second opinion.

From February, 2013 to September, 2021, 140 pediatric cardiac patients with complex clinical scenarios were discussed during 51 videoconferences. More than 40 CHOP experts from different sub-specialties participated actively in consultations. Several videoconferences, with a multidisciplinary character, were attended by colleagues from relevant specialty teams. Significant divergence from current diagnostic and therapeutic plans was recommended in one-third of cases. The recommendations were fully or partially adopted in more than 90 % of cases.

Videoconferencing also serves as an educational tool as knowledge and experience gained from experts is used for management of future patients. Videoconference attendance has been approved by the Slovak Medical Chamber as a continuous medical education activity in Pediatric Cardiology.

Videoconferences with CHOP experts were incorporated into the scientific agenda of Slovak National Conference in Pediatric Cardiology. Although observerships, professorships, national and international conferences have been cancelled, videoconferencing project continued during covid pandemics.

Based on our experience we consider videoconferencing a suitable form for medical consultations in pediatric cardiology and an effective educational tool providing an opportunity to gain knowledge and experience "without borders".



**L'UBICA KOVÁČIKOVÁ**

Director Pediatric Cardiac Intensive  
Care Unit, The National Institute of  
Cardiovascular Diseases, Pod Krásnou  
hôrkou, Bratislava, Slovakia



**VLADIMÍR MIČIETA**

Country Manager, Medtronic

## THE ROLE OF TELEMEDICINE DURING AND POST COVID-19 OUTBREAK

Telemedicine is a key solution in the process of optimizing medical procedures, many of which have been accelerated by the advent of the COVID-19 pandemic. It provides remote healthcare services through the use of information and communication technologies in conjunction with various medical devices. Telemedicine is the secure transmission of health data and information in the form of data, text, sound, images or other form. It is used for prevention, diagnosis, treatment, medication and subsequent care of patients. With the help of remote diagnostics, the doctor can detect on the spot if the patient has certain symptoms much earlier than during a routine examination and thus prevent the escalation of the disease and the onset of more serious complications.

Over the past decades, telemedicine has changed radically due to the rapid development of information and communication technologies. Today, this is a standard solution offered by modern clinics and general practitioners. Telemedicine is a broad term that includes other terms with different levels of technological difficulty. These include:

- Teleconsultations through a phone interview. A specific version is a video call with secure documentation sharing and with managed preparation for a video call, both on the part of the patient and the doctor. For example, the patient records blood pressure or blood sugar values during the recent weeks under conditions agreed on with the physician.
- Teleconsilium, in which experts residing at different places connect via telebridge to discuss and establish a common clinical conclusion.
- Telemonitoring / Telediagnosics, which make it possible to obtain and partially also evaluate the physiological functions and symptoms of the patient without recording them on paper and then transcribing them into the patient's medical records.



**Medtronic**

## FUTURE OF MEDICINE

We live in a post-genomic era, where data, molecular engineering, and new frameworks redefine possibilities. Researchers, engineers, and biotech firms are moving beyond the “nature-inspired” paradigm.

The lines between biology, engineering, nanotech, and IT are becoming increasingly blurred. What we’re seeing here isn’t just gradual iteration. It’s a revolution, a mass convergence of multiple different fields: Bioconvergence.

Israel continues to shine as hub of med-tech innovation. In recent years, Israel has proven to be a hot spot for med-tech innovation. The country boasts more than 1,500 companies in the health care and life sciences sectors, roughly 70% in medical devices and digital health. More than a hundred new companies focused on medical technology launch each year.



**KARINA RUBINSTEIN**

Sr. Director of Business Development,  
Israel Innovation Authority



## RUTHY KAIDAR

Director Health Industry  
Sector Central  
& Eastern Europe Microsoft

## INNOVATIVE SOLUTIONS, CUTTING EDGE TECHNOLOGIES

Patient expectations have evolved. Healthcare providers are re-thinking and reworking effective patient engagement strategies and platforms to meet these expectations. They must bring many different patient touchpoints into one common journey and build a clear, comprehensive view of each patient. This personalized approach gives healthcare organizations clarity when it matters and allows health teams to provide the kind of care patients need. Real-time, continuous interactions between patients and caregivers lead to better engagements and better patient outcomes.

**Consumer expectations from their Healthcare providers are changing**, as they look for new, safe ways to engage with providers and monitor their own wellness. Healthcare organizations look for solutions to keep connected with patients and improve communication. Patients have higher expectations than ever for their doctors, their insurers, and the treatments they receive. Patients want to access services whenever they want, from wherever they are, and on whatever device they're using. Patients are also looking for more personalized and transparent healthcare services.

**Healthcare providers are finding new ways to engage with patients.** Patients expect digital processes and personalized care. By building a comprehensive 360-degree picture of each individual patient, providers are able to deliver the information patients need, through the channel they prefer. Patients gain a 360-degree view of their wellness. This increases the ability to deliver care at scale and move to more value[1]based care.

**Healthcare providers are innovating next-generation patient engagement systems.** To meet patient's expectations, health providers need to first understand who patients are. By consolidating information from all parts of the patient experience into a single platform, health providers can gain that holistic patient view. Real-time patient care platforms can help care teams connect and share information quickly, to give patients the information and care they need in real time, ensuring faster and smarter interventions, allowing to implement actionable, clinically translated intelligence into workflows, and ultimately to deliver better experiences and better care.

Microsoft is committed to helping the healthcare industry get the tools it needs to meet patient expectations, health provider needs, and to help the world stay connected, secure, and productive through the crisis and beyond.

## INNOVATIVE SOLUTIONS, CUTTING EDGE TECHNOLOGIES

I consider the patient's journey to be a process of providing health care to an individual. The basis is a holistic approach to the patient, where we are aware that it is necessary to perceive the person as a whole, i.e. the interplay and combination of mental and physical characteristics. Only an individualized approach based on clearly defined procedures in the provision of planned health care can bring the desired benefits to the patient.

The most important thing, in my opinion, is the fact that the patient should not be just an object in the process. The role of the patient is to become active and he must become an aware partner of health care provider, because the involvement of the patient multiplies the overall benefit. An example of such a symbiosis is the ERAS protocol. It is a standardized procedure that takes into account the individuality of the patient in each step and helps both him and the professional team to manage the process of providing health care during surgical interventions as effectively as possible. It includes preoperative, operative and postoperative care, which is highly standardized but multidisciplinary, as it combines the work of a surgeon, psychologist, early rehabilitation, and nutritional counseling. An essential part of this process is to set up effective, standardized communication between healthcare professionals and the patient, but also between healthcare professionals themselves.

Based on experience from abroad, such an approach is universally beneficial and cost-effective. Precisely such approach is our goal, as we are aware of the limited resources available. In this case, electronization also provides a helping hand to the system, which through the gradual introduction of telemedicine into healthcare, can deepen the connection between the patient and the medical staff. In this case, however, we must not forget the patient of general (internal) medicine, whose management is no less demanding. In this case, the transfer of health care between types seems like a solution to us, especially the transfer to day centers and hospital beds available for observation. However, these steps would mean a more fundamental reorganization of the healthcare provision process.



**MIRIAM  
LAPUNÍKOVÁ**

Director, FNŠP BB



**VERONIKA  
HUDZÍKOVÁ**

Application Developer,  
Deutsche Telekom IT Solutions Slovakia

## MENTAL HEALTH & TECHNOLOGIES

Cognity Care is an innovative feature for the treatment of mental disorders using virtual reality. It is a form of therapy combining interaction and exposure, where the patient in virtual reality carries out specially developed activities in a playful manner. These activities are intended to improve the diagnosis process and treatment of particular mental disorders. Added value of using the virtual reality is relaxation, the educational effect, involvement of the patient as well as the lowering of stress levels usually experienced as part of the general treatment methods.



DEUTSCHE TELEKOM IT SOLUTIONS

## THREATS TO HEALTH CYBERATTACKS

IBM as one of the biggest security provider in the world with more than 8000 people working in cyber security is focusing on Healthcare. IBM X force team, shows that healthcare cyberattacks doubled in 2020 with 28 percent share of ransomware. This attack will encrypt data, and attacker will request payment to avoid data exposure or just simple steal the data.

Its almost the same attack, that we saw in 2020 in Czech republic, in hospital Rudolfa and Stefanie in Benesov. Ransomware attacked hospital computers, that leads to inability to perform surgeries and medical assistance. Damage to hospital were 59 milions of Czech crowns. Almost 6.6 percent of all cyberattacks across industry sectors aiming to Healthcare system.

Increasing amount of Cyberattacks creates high demand for Cyber security. Due to limited amount of security specialists, is important to create Security Operation centers that will cover various areas. From analyzes, protection to investigation and orchestration of security incidents. Similar attack that happened in Czech republic can also happened in Slovakia. To prevent this cases its important to build and increase capabilities in cyber security across all healthcare entities.

National Health System - NHS - in United Kingdom stands Face to Face to the same problem. Increasing amount of cyber attack, created demand to increase level of cyber security. NHS started project, that focused on hospitals across country. They perform detailed analysis of hospitals and they maturity. After that NHS create plan to increase security on required level. Next level was implementation of technology and again work on improvement for future threats.

Cyber security is never ending process.

The IBM logo, consisting of the letters 'IBM' in a bold, blue, sans-serif font with horizontal stripes.

## FRIDRICH MATEJÍK

Country Leader, IBM



## VALUE BASED PROCUREMENT IN HEALTH CARE

Slovak healthcare procurement has made a significant progress over past couple of years. Central procurements of the ministry demonstrated that it is possible to realize large scale standardized procurement and yet focus on quality and added value of tenders. Procurement of technologies is just a small part of the entire tendering ecosystem. The largest untapped added value is in procurement of services, i.e. treatments or surgeries for patients. This is a responsibility of health insurance companies and providers. However, there are several significant obstacles that limit procuring options of insurance companies. Unpredictability of expenditure, changing budgets, re-insurance campaigns on a yearly basis render value-based procurement useless and inefficient. These are the obstacles that prevent us, as a country, to improve overall well-being and “upgrade” our health system. These are the problems that need to be a priority to decision makers and regulators.

**MARTIN SMATANA**

Healthcare analyst at MSquare, a.s  
& Health Fellow at Globsec



## VALUE BASED PROCUREMENT IN HEALTH CARE

Value-based procurement (VBP) is a collaborative, multidisciplinary approach to partnering for patient centric, better quality and more financially sustainable healthcare. VBP involves pursuing better outcomes for patients and other healthcare actors while optimizing the cost of delivering care. It represents a shift away from the traditional focus on price of supplies (inputs), towards a new approach that emphasizes what is valued (outputs).\* By focusing on value, including cost of care and outcomes criteria instead of price alone, procurement authorities can play a role in delivering better quality care more efficiently. Some healthcare providers across Europe are already testing new approaches to value-based procurement (VBP).

\* [https://www.medtecheurope.org/wp-content/uploads/2020/06/2019\\_VBPC-Event-Report.pdf](https://www.medtecheurope.org/wp-content/uploads/2020/06/2019_VBPC-Event-Report.pdf)



**PAVOL LEPEY**

Head of Healthcare Transformation  
& Market Access, Roche Slovensko



## PETRA ZAPPE

Senior Policy Manager  
and Conference Lead

**“WHEN THE WINDS OF CHANGE  
BLOW, SOME PEOPLE BUILD WALLS,  
OTHERS BUILD WINDMILLS.”**

It is a Chinese Proverb, for me a beautiful illustration of how also current global pandemic Covid-19 can be harnessed into something positive and creative.

AmCham conference „The Importance of Innovation in Slovak Healthcare“ brings the message of urgency, that we need to rethink the approach to science, technology, and innovation, especially in the field of healthcare and mobilize experts, industry, and governments, so together we can evaluate alternative trajectories for ever-increasing and recurring challenges in the field of healthcare.





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