the new now HEALTH

SYMPOSIUM# 04.26:

HEALTHY AGING ALONG THE CARE CONTINUUM

satw technology for society

CHINESE ACADEMY OF ENGINEERING 中國工程院

CAE-SATW INNOVATION SYMPOSIUM

APRIL 27–29, 2026 | GENEVA

WELCOME

Honored Guests,

Esteemed Colleagues,

It is with great pleasure and sincere respect that we welcome you to this third CAE-SATW Innovation Symposium, jointly organized by the Chinese Academy of Engineering and the Swiss Academy of Engineering Sciences.

Over the years, these annual meetings have grown in both scale and ambition, and we are particularly pleased this year to move beyond dialogue and into concrete initiatives and collaborations.

The central theme of this edition is aging. Each year, we explore a specific dimension of this major societal challenge. This time, our discussions will place a special focus on the role of technology, and in particular on the concept of the virtual hospital, an area where significant advances are already reshaping healthcare delivery.

As clinicians, researchers, and innovators, we know that the challenge is not only to extend life expectancy, but to preserve physical and cognitive function, enabling individuals to remain autonomous, active, and engaged throughout their lives. In both China and Switzerland, demographic shifts are profound: by mid-century, older adults will represent a substantial share of the population. Behind these figures lie very concrete realities, frailty, chronic disease, and cognitive decline, which call for innovative, science-driven responses.

This symposium brings together leading experts across medicine, engineering, and technology. Together, we will explore how advances in digital health, diagnostics, rehabilitation, and new care models can contribute to a more proactive and integrated approach to aging. Our ambition is to bridge disciplines and perspectives, and to connect research, clinical practice, and technological innovation.

We are privileged to welcome an exceptional group of speakers, whose insights and experience will help us better understand how to support aging not only at its later stages, but throughout the life course, preserving performance, autonomy, and quality of life.

More than an academic exchange, this symposium is a platform for building lasting and actionable collaborations between China and Switzerland. By combining our strengths, we have a unique opportunity to develop new models of care and to redefine what it means to age, not just longer, but better.

We warmly thank all those who have contributed to the organization of this event.

We invite each of you to engage actively in the discussions, to share your perspectives, and to help shape the next steps together.

We wish you all a stimulating and inspiring symposium.

Thank you.

Prof. Chen Jianfeng
Secretary-General CAE

Prof. Benoît DUBUIS
President SATW

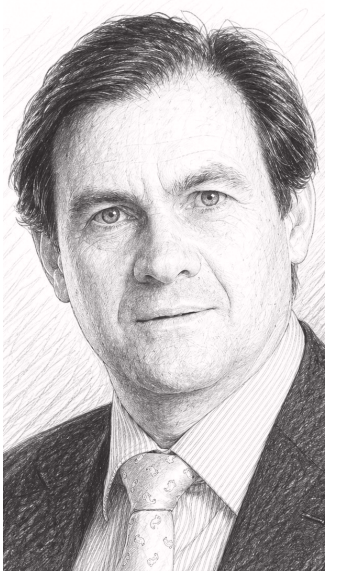
CHEN JIANFENG

SECRETARY-GENERAL OF THE CHINESE ACADEMY OF ENGINEERING.

MEMBER OF THE CHINESE ACADEMY OF ENGINEERING

Prof. Chen Jianfeng, an expert in the field of chemical engineering, a Member of the Chinese Academy of Engineering, is the Secretary General of the CAE. He is an also executive member of the World Chemical Engineering Council (representing China), and a member of National Manufacturing Power Construction Strategy Advisory Committee. As one of the pioneers of high-gravity technology in the world, he has taken the lead in proposing the engineering concept of high-gravity reactors and achieved industrialization, making important contributions to making China a leading country in the international high-gravity chemical industry. He has published over 400 academic papers in mainstream international chemical journals, as well as two monographs. He has been recognized as ESI highly cited Chinese researchers for many years, obtaining over 220 Chinese invention patent authorizations and over 20 foreign invention patent authorizations. He received 2 second prizes for national technological invention and 1 second prize for national scientific and technological progress as the first person to complete the project.

BENOIT DUBUIS



PRESIDENT OF THE SWISS ACADEMY OF ENGINEERING SCIENCES

PRESIDENT OF THE FONDATION INARTIS

PROFESSOR AT THE UNIVERSITY OF GENEVA (UNIGE)

PRESIDENT OF THE BOARD, RECONNECT INSTITUTE (AFFILIATED WITH INSTITUT PASTEUR)

FOREIGN MEMBER OF THE CHINESE ACADEMY OF ENGINEERING

MEMBER OF THE INTERNATIONAL COUNCIL OF ACADEMIES OF ENGINEERING AND TECHNOLOGICAL SCIENCES

MEMBER OF THE EUROPEAN COUNCIL OF APPLIED SCIENCES, TECHNOLOGIES AND ENGINEERING

DEAN OF THE SINO SWISS INSTITUTE OF ADVANCED TECHNOLOGY

Prof. Benoît Dubuis is Professor at the University of Geneva (UNIGE). He holds a PhD from ETH Zurich (ETH Medal, 1995), a degree in Chemical Engineering from École Polytechnique Fédérale de Lausanne (EPFL), and an MTE from IMD Business School.

He brings over 30 years of international experience at the intersection of life sciences, innovation, and academic leadership. After academic work in the UK, he held senior positions in the pharmaceutical and biotech industries, including at Ciba-Geigy / Novartis, Lonza, and Chemap.

In 2000, he joined École Polytechnique Fédérale de Lausanne (EPFL) , where he founded the School of Life Sciences and led the integration of ISREC. He contributed to the launch of BioAlps and founded Excellgene SA. In 2004, he co-founded Eclosion, Switzerland's first life sciences seed fund. In 2013, he became Executive Director of Campus Biotech and Development Director of the Wyss Center for Bio and Neuroengineering.

Since 2018, he has been Professor at the Faculty of Medicine of the University of Geneva, contributing to translational initiatives linking research to impact, and leads the Health Valley initiative.

He is President of the Fondation Inartis, President of the Swiss Academy of Engineering Sciences, President of the Board of the reConnect Institute (affiliated with the Institut Pasteur), Foreign Member of the Chinese Academy of Engineering, Member of International Council of Academies of Engineering and Technological Sciences and European Council of Applied Sciences, Technologies and Engineering, and Dean of the Sino Swiss Institute of Advanced Technology.

PROGRAM OVERVIEW

MONDAY, APRIL 27, 2026

11:00 – 12:30 | Nestlé, Lausanne

Presentation and laboratory visit
(Optional side visit)

13:00 – 16:30 | EPFL, ECUBLENS

Program and discussions (including lunch)

17'00 | Watch manufacture visit

Visit of the watch manufacturer Dominique Renaud SA & aperitif
(Optional side visit)

TUESDAY, APRIL 28, 2026

09:30 – 12:00 | CAE-SATW SYMPOSIUM

CAE-SATW Innovation Symposium
Opening ceremony & symposium

12:30 – 14:30 | CERN, MEYRIN

Lunch and visit

15:00 – 16:00 | CAE-SATW SYMPOSIUM

CAE-SATW Innovation Symposium
Interactive discussion

LATE AFTERNOON | GENEVA

Free time / city visit

WEDNESDAY, APRIL 29, 2026

09:30 – 11:00 | SFITS, GENEVA

Visit and welcome

11:15 – 12:45 | HUG, GENEVA

Welcome by the CEO of the HUG and the General Director CERN | exchanges and visit

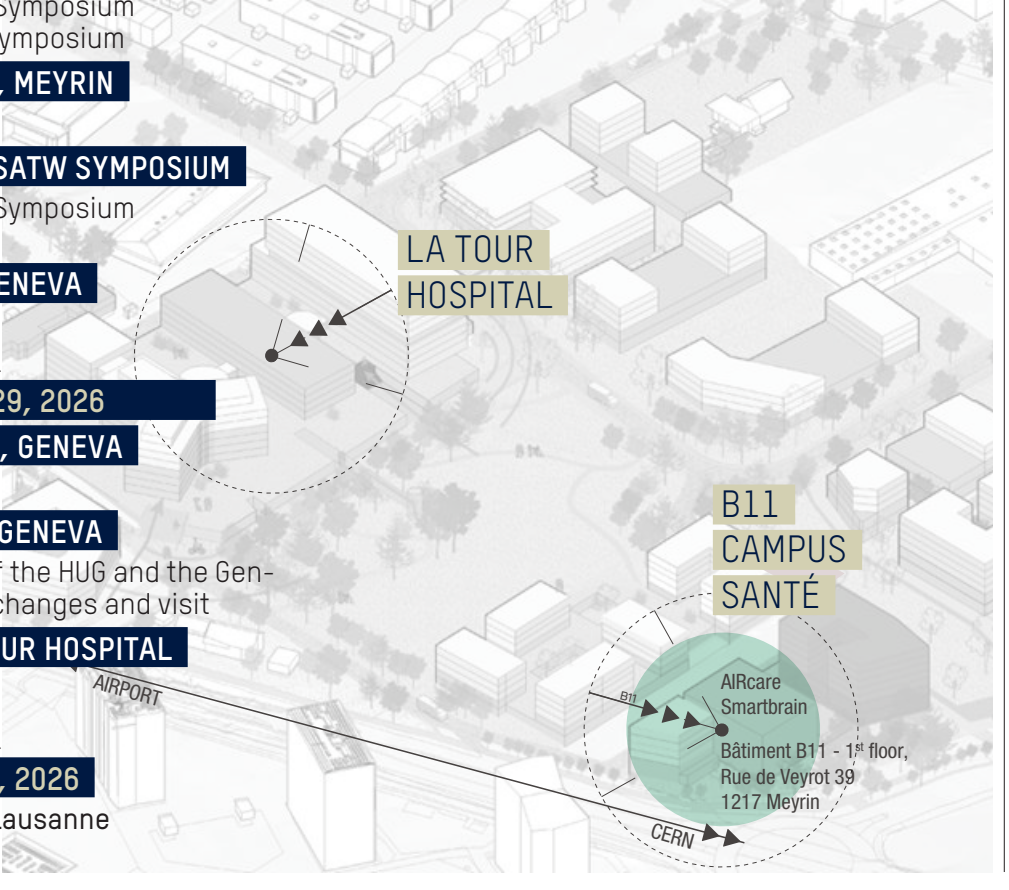
13:30 – 15:00 | LA TOUR HOSPITAL

Hospital visit

THURSDAY, APRIL 30, 2026

13:15 – 15:00 | CHUV, Lausanne
(Optional side visit)

LOCATION



INNOVATION SYMPOSIUM

09:30 | OPENING CEREMONY

SATW President Prof. Benoît Dubuis
CAE Secretary-General Prof. CHEN Jianfeng

SESSION 1

Understanding Ageing: Biological Foundations and Emerging Challenges

09:45 – 10:45

This opening session sets the scientific foundation of the symposium by exploring how our understanding of ageing is evolving–from a focus on disease management toward the preservation of vitality throughout life. Ageing is increasingly recognized not simply as a chronological process, but as a complex biological phenomenon shaped by genetics, lifestyle, and environment.

The session will highlight how advances in biology, medicine, and nutrition contribute to a deeper understanding of ageing mechanisms and open new perspectives for maintaining health and performance across the lifespan. By bringing together fundamental science and applied research, it will frame a central question: how to transform the ambition of living longer into the reality of living better.

Speakers and presentations:

Prof. Martin Fussenegger – Towards Cybernetic Therapeutics

Dr. Cheng Jing – The Construction of an Intelligent Ecosystem for Health Management at Home

Dr. Ryan Carvalho – Nutrition, metabolism and lifelong health

Prof. Xu Ruihua – Towards a Healthy Ageing Society: Progress and Challenges in Reducing Cancer Burden in China

Prof. Liu Lan – China's Stroke Prevention and Control Million Disability Reduction Project: Construction and Practice of a Virtual Remote Hospital System

Official photo

SESSION 2

The Virtual Hospital: Toward Continuous and Data-Driven Healthcare

11:00 – 12:00

This session explores the transformation of healthcare systems toward a continuous, data-driven, and personalized model. While life expectancy has significantly increased, the key challenge now lies in maintaining physical, cognitive, and social vitality over time.

The discussion will focus on how digital technologies, remote care, and integrated approaches are reshaping healthcare delivery–moving from reactive interventions to proactive, preventive, and home-based care models. Particular attention will be given to the concept of the virtual hospital and its role in enabling patients to remain longer at home while benefiting from continuous monitoring and personalized support.

Speakers and presentations:

Prof. Robert Mardini – The virtual hospital and future care models

Prof. Jean-Pierre Michel – Demographic transitions and healthcare systems

Prof. Ning Guang – The Epoch of Digital Medicine

Prof. Dong Jiahong – AI Hospital to AI Health Ecosystem

12:30 – 14:30 | LUNCH AND VISIT OF CERN

SESSION 3

Closing the Gap: Toward Personalized, Integrative and Continuous Healthcare

15:00 – 16:00

This session highlights pioneering initiatives translating scientific discoveries into practical solutions supporting vitality and healthy ageing. At the intersection of biotechnology, neurotechnology, and wearable sensing, these approaches demonstrate how innovation and data can enable earlier detection, more personalized interventions, and continuous health monitoring.

The session will illustrate how the convergence of engineering, medicine, and entrepreneurship is shaping a new model of care–integrative, adaptive, and centered on maintaining functional performance and independence throughout life.

Speakers and presentations:

Prof. Adrian Ionescu – Next-generation wearable biosensing technologies

Prof. Jiang Baoguo – Research on the Mechanisms and Therapeutic Strategies of Bone Aging

Dr. Alexandre Pauchard – Innovation for healthy ageing: from deep-tech to impact

Dr. Michel Matter – Optimizing human performance through vision training

16:00 - 16'15 | CONCLUSION & FOLLOW-UP

EXECUTIVE BRIEFING

Editorial

FROM HEALTH AGING TO VITAL LIVING

TOWARD CONTINUOUS AND INTEGRATED HEALTHCARE

A discussion paper to frame and stimulate the dialogue

BY BENOÎT DUBUIS,
PRESIDENT SATW AND OF THE INARTIS FOUNDATION

The following reflections are intended to open and structure the discussion. They do not aim to provide definitive answers, but rather to outline a shared framework from which we can collectively explore the future of health in ageing societies.

The discussion on ageing is undergoing a profound transformation. While the concept of healthy ageing has traditionally focused on the prevention of disease, a broader and more dynamic perspective is emerging, one that can be described as vital living. This approach shifts the focus from avoiding decline to maintaining physical, cognitive, and social performance throughout the lifespan. The challenge is no longer confined to the later stages of life, but concerns the continuous preservation of vitality: strength, balance, memory, attention, and the capacity to remain autonomous, engaged, and fully integrated in society.

This conceptual shift is not only philosophical, it reflects an urgent clinical and societal reality. Longevity has increased dramatically over the past century, yet longer lives are not always synonymous with better lives. As populations age, the prevalence of frailty, cognitive decline, multimorbidity, and loss of independence is rising. These trends are placing growing pressure on individuals, families, and healthcare systems. The key question is therefore evolving: how can we sustain functional capacity and quality of life over extended lifespans?

THE HOSPITAL OF THE FUTURE WILL NO LONGER BE DEFINED BY ITS WALLS, BUT BY ITS ABILITY TO REACH THE PATIENT WHEREVER LIFE HAPPENS.

From this perspective, vitality itself becomes a clinical target. The objective is not simply to extend lifespan, but to maintain sufficient physiological and cognitive reserves to support autonomy. Achieving this requires a transition from reactive care to proactive, preventive, and personalized approaches—an evolution that naturally leads to a rethinking of how and where healthcare is delivered.

Historically, hospitals have been conceived as centralized institutions, "cathedrals" of care—designed to manage disease once it has manifested. However, this model is increasingly reaching its limits. Healthcare can no longer be defined as a place; it must become a continuum. The emerging paradigm is that of a distributed, integrative, and augmented system, where care extends beyond institutional walls and into everyday life.

The concept of the virtual hospital embodies this transformation. Healthcare is becoming continuous, data-driven, and personalized. In this new model, the hospital does not disappear—it moves closer to the patient. Through hospital at home approaches, care is delivered within the individual's living environment, supported by digital technologies and remote monitoring systems.

At the same time, a complementary shift is taking place: the patient is no longer only the recipient of care but becomes an active node within the healthcare system. Wearables and nearables, integrated into the body or the immediate environment, enable continuous monitoring of physiological, behavioral, and cognitive parameters. Mobility, sleep, cardiovascular function, and even attention or reaction time can now be measured in real time. These technologies allow not only the hospital to extend outward, but also the patient to be placed at the very center of a continuous feedback loop, where data inform decisions and interventions in a dynamic and personalized manner.

This evolution fundamentally changes the nature of care. What was once episodic becomes continuous; what relied on clinical intuition becomes measurable and model-driven. Artificial intelligence can integrate these data streams into predictive models, enabling early detection of risk and timely intervention. In this sense, healthcare is no longer triggered by disease, it becomes an ongoing process of maintaining balance and performance.

Scientific advances further reinforce this transition. Biomarkers, advanced imaging, and genomics allow earlier and more precise risk stratification. Developments in neuroscience, functional medicine, and rehabilitation contribute to preserving both physical and cognitive capacities. Here, brain health

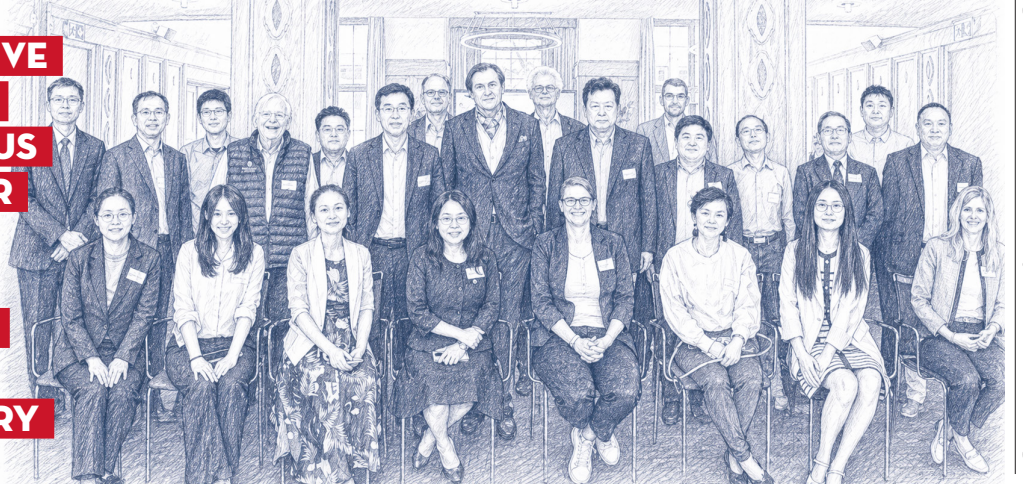
emerges as a central dimension. Cognitive function is not only essential for quality of life, but also a key determinant of independence. Tools designed to enhance visual and auditory processing, attention, and reaction, often derived from high-performance domains such as sport, illustrate how innovation can be translated into broader applications supporting resilience across the lifespan.

These technological and clinical transformations naturally extend into the social and organizational domain. Ageing is not only a medical issue but a systemic challenge affecting healthcare systems, economic structures, and social cohesion. Addressing it requires coordinated efforts across disciplines, medicine, engineering, public health, and industry, as well as new forms of collaboration capable of accelerating innovation and scaling solutions.

In this broader context, the notion of vital living provides a unifying framework. It reframes ageing not as a passive process of decline, but as an active trajectory in which vitality, physical, cognitive, and social, is continuously supported. The hospital of the future does not disappear; it transforms. It becomes virtual, integrated, and present wherever the patient is, most often at home, embedded within daily life. Technology, in this evolution, must remain a means rather than an end: discreet, supportive, and seamlessly integrated, serving a fundamentally human objective.

These elements are proposed as a starting point for discussion. They invite us to reflect collectively on how we can design healthcare systems that not only extend life, but sustain vitality, autonomy, and meaningful engagement throughout it.

HEALTHCARE IS EVOLVING FROM A REACTIVE INTERVENTION TO A CONTINOUS JOURNEY WHER PROACTIVE, PREVENTIVE, & INTEGRATIVE CARE SHAPE THE TRAJECTORY OF LIFE.



Openging ceromony of the 2nd CAE-SATW Innovation Symposium by Prof. LI Xiaohong President of the Chinese Academy of Engineering

sept, 2025 | Shanghai

below:
Openging ceromony of the 1st CAE-SATW Innovation Symposium

July, 2024 | Zurich

SPEAKERS

PROF. DONG JIAHONG

MEMBER, CHINESE ACADEMY OF ENGINEERING

PRESIDENT, BEIJING TSINGHUA CHANGGUNG HOSPITAL

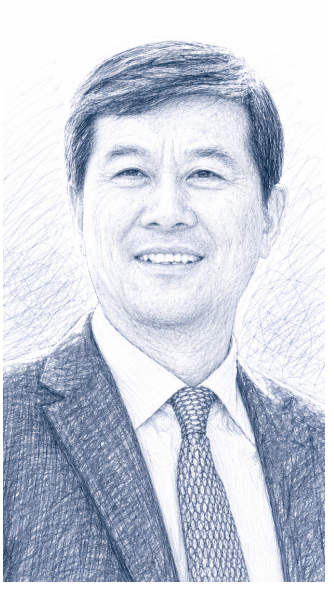
M.D, Ph.D, ASA (Hon), ESA (Hon)
Academician, Chinese Academy of the Engineering

Honorary Academician, French National Academy of Surgery

Chair Professor, Tsinghua University Dean, School of Clinical Medicine, Tsinghua

UniversityPresident, Beijing Tsinghua Changgung Hospital

Vice President, Chinese Medical Doctor Association



Professor Dong has attained many remarkable achievements in the field of hepatobiliary surgery, especially in the long-term management of complex biliary diseases. He was the first to propose the concept of "Precision Surgery" worldwide and has since been undertaking endeavors in establishing the associated surgical paradigms and technological systems. The proposal of "precision liver surgery" in 2006 ushered in a paradigm shift from conventional experience-based surgical practices to that of modern precision surgery.

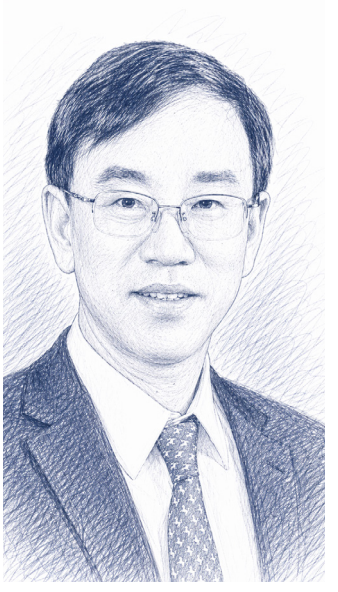
Professor Dong has published more than 200 SCI papers as either first author or corresponding author, and has presided over the establishment of 17 industry standard guides. For his outstanding contributions to hepatobiliary surgery, Professor Dong was awarded the 2nd prize of the National Award of Science and Technology Progress as the first contributor and the 1st prize of the National Award of Science and Technology Progress as Co-director.

FOR YOUR NOTES

PROF. JIANG BAOGUO

MEMBER, CHINESE ACADEMY OF ENGINEERING

DIRECTOR, NATIONAL TRAUMA MEDICAL CENTER



Jiang Baoguo is a member of the Chinese Academy of Engineering, Doctor of Medicine, Professor, Chief Physician, and Doctoral Supervisor. He is a recipient of the National Science Fund for Distinguished Young Scholars and served as the Chief Scientist of the National «973» Program. He previously held the position of the 7th Chairman of the Trauma Science Branch of the Chinese Medical Association and the 12th Chairman of the Orthopedics Branch of the Beijing Medical Association. He currently serves as the Director of the National Trauma Medical Center, Chairman of the Clinical Practice Teaching Steering Sub-committee of the Ministry of Education's Higher Education Institutions, Chairman of the National Alliance for Clinical Practice Education in University-Affiliated Hospitals, Vice President of the China Medical Rescue Association, and Chairman of the Patient Experience Management and Evaluation Committee of the Chinese Research Hospital Association.

Prof. Jiang has been engaged in clinical trauma medicine research for over 30 years, dedicating his academic work to reducing the mortality and disability rates associated with trauma. He is an academic leader in the field of clinical multiple injury treatment in China. He has achieved significant accomplishments in peripheral nerve injury repair techniques, diagnosis and treatment techniques for periarticular fractures, and the construction of severe trauma care systems. As the principal investigator, he received one second-class prize of the National Science and Technology Progress Award (2016) and three first-class provincial and ministerial-level awards. Individually, he has been honored with the Chinese Academy of Engineering's Guanghua Engineering Science and Technology Award and the Ho Leung Ho Lee Foundation Science and Technology Progress Award. In 2017, he was recognized as an Advanced Worker in the National Health System. In 2020, he received the commendation of «National Advanced Individual in the Fight Against the COVID-19 Pandemic» from the Central Committee of the Communist Party of China, the State Council, and the Central Military Commission.

FOR YOUR NOTES

PROF. CHENG JING

PROFESSOR AT THE SCHOOL OF BIOMEDICAL ENGINEERING, TSINGHUA UNIVERSITY

DIRECTOR OF THE RESEARCH CENTER FOR INTELLIGENT CHINESE MEDICINE ENGINEERING

DIRECTOR OF THE NATIONAL ENGINEERING RESEARCH CENTER FOR BEIJING BIOCHIP TECHNOLOGY.

He is a Member of the Chinese Academy of Engineering, a Member of the International Academy of Sciences for Europe and Asia, a Fellow of the Chinese Academy of Medical Sciences, a Fellow of the China Academy of Chinese Medical Sciences, and a Fellow of the American Institute for Medical and Biological Engineering.

Dr. CHENG received his Ph.D. degree in Forensic Sciences from the University of Strathclyde (UK) in 1992. He has made significant advances in the area of biotechnology especially in the field of biochip technology. He has established a series of biochip-based molecular typing systems for disease prevention, diagnosis and prognosis; and developed a variety of biochips for the analysis of genes, proteins and cells. Most of these chips have been certified by the National Medical Products Administration and applied in hospitals. Additionally, he played a key role in developing and manufacturing a full line of instruments for biochips. Over the last decade, he has been responsible for building a comprehensive health management platform by upgrading the Traditional Chinese

Medicine (TCM) such as developing AI assisted TCM equipment for diagnosis and treatment, and constructing the Molecular Compendium of Materia Medica.

Dr.CHENG has published over 180 peer-reviewed papers in journals such as Nature Biotechnology, Signal Transduction and Targeted Therapy, among others; has edited 8 books and has obtained more than 400 patents. He has received numerous awards, including the Second Prize of the National Awards for Technological Innovation on two occasions.

FOR YOUR NOTES

PROF. XU RUIHUA

RUI-HUA XU, M.D., PH.D.

PROFESSOR OF MEDICAL ONCOLOGY

DIRECTOR OF SUN YAT-SEN UNIVERSITY CANCER CENTER

MEMBER OF THE ACADEMIC COMMITTEE OF THE CHINESE ACADEMY OF MEDICAL SCIENCES

DIRECTOR OF STATE KEY LABORATORY OF ONCOLOGY IN SOUTH CHINA

FORMER PRESIDENT OF CHINESE SOCIETY OF CLINICAL ONCOLOGY (CSCO)

VICE-CHAIRMAN OF CHINA ANTI-CANCER ASSOCIATION (CACA)

EDITOR-IN-CHIEF OF CANCER COMMUNICATIONS (IF 24.9)

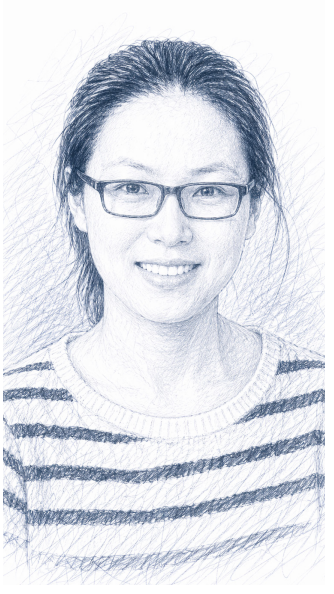
Professor Xu has made profound contributions to the research and treatment of GI cancer, advancing both theoretical understanding and clinical practice in the field. His pioneering work has elevated China's capability in early diagnosis and precision treatment of GI cancer to an internationally advanced level. His contributions have redefined the immunotherapy strategy for GI cancer. Prof. Xu, as the leading PI, has conducted a series of global or national multi-center clinical trials in GI cancer. The novel regimens derived from these trials have been widely adopted in clincal practice worldwide, significantly prolonging the overall survival of patients. Notably,his clinical research on two innovative Chinese PD-1 antibodies—Toripalimab and Tesilelizumab — has been approved from both FDA and EMA.

Prof. Xu has published more than 300 peer-reviewed papers in leading journals, including NEJM, JAMA, Cell, BMJ, Cancer Cell, Nature Medicine, Nature Materials and Lancet Oncology. His distinction as a «Highly Cited Researcher» by Clarivate Analytics underscores his profound influence and broad recognition within the global scientific community. He has been honored with two State Scientific and Technological Progress Awards and the National Innovation Competition Award.

FOR YOUR NOTES

PROF. LIU LAN

FULL PROFESSOR AT CAPITAL MEDICAL UNIVERSITY



Professor Lan Liu is a full professor at Capital Medical University and has been honored with the title of Overseas High-Level Talent. She completed her undergraduate studies at the University of Science and Technology of China and then pursued her Ph.D. in Biostatistics at the University of North Carolina at Chapel Hill (UNC), a program ranked among the top three in the United States, earning her doctorate in three years. Following her Ph.D., she conducted postdoctoral research in the Department of Biostatistics and Epidemiology at Harvard University. She later became a tenured associate professor of statistics at the University of Minnesota, where she also served as the director of the Statistical Consulting Center.

FOR YOUR NOTES

PROF. NING GUANG

MEMBER, CHINESE ACADEMY OF ENGINEERING

PROFESSOR IN SHANGHAI JIAO TONG UNIVERSITY

PRESIDENT OF RUIJIN HOSPITAL, SHANGHAI JIAO TONG UNIVERSITY SCHOOL OF MEDICINE

Practiced as an endocrinologist for 30+ years, Prof. NING Guang is the Guang Qi Professor in Shanghai Jiao Tong University and now serves as the President of Ruijin Hospital, Shanghai Jiao Tong University School of Medicine. He is elected as a member of Chinese Academy of Engineering in 2015. Prof. Ning dedicates his life career to clinical and basic research on endocrine and metabolic diseases, e.g. diabetes, obesity, endocrine tumors and etc. He is trained as a clinical doctor in China and as a postdoctoral fellow in Baylor College of Medicine in USA.

Prof. Ning has extensively engaged with national and international strategic science collaboration, e.g. national technology forecasting for 2035, health reform evaluation, pilot grants decision-making, inter-disciplinary collaboration and big-data regulation in biomedical industry. He received the Chinese International Endocrinology Award from American Association of Clinical Endocrinologists; the Lifetime Achievement Award from Israeli Diabetes Association and Israeli Ministry of Health; ANM-Servier Medical Prize from French National Academy of Medical Sciences; Yutaka Seino Outstanding Leadership Award from the Asian Association for the Study of Diabetes; and Honorary Fellowship Award from American College of Cardiology. He is elected to serve as an Advisory Committee member of InterAcademy Partnership (IAP) during 2023-2028.

FOR YOUR NOTES

ROBERT MARDINI

CEO GENEVA UNIVERSITY HOSPITALS (HUG)

MEMBER OF THE SWISS ACADEMY OF ENGINEERING SCIENCES

Robert Mardini took office as Director-General of the Geneva University Hospitals (HUG) on September 1, 2024, after leading the International Committee of the Red Cross (ICRC) from 2020 to 2024. Drawing on his experience at the helm of global humanitarian operations, he brings to HUG a vision focused on excellence in care, innovation, and inclusion.

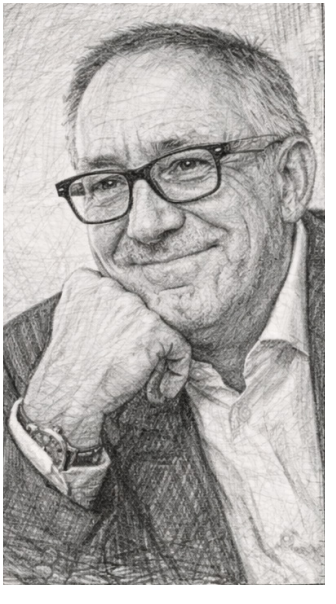
A trained engineer with a master's degree in civil and hydraulic engineering from the École polytechnique fédérale de Lausanne (EPFL), Robert Mardini began his career at the ICRC in 1997 and held several senior leadership positions before becoming the organization's Director-General.

DR MICHEL MATTER

OPHTHALMOLOGIST MD

PRESIDENT GENEVA DOCTORS' ASSOCIATION

PAST MEMBER OF THE SWISS PARLIAMENT



ALEXANDRE PAUCHARD

CEO AT CSEM (SWISS CENTER FOR ELECTRONICS AND MICROTECHNOLOGY)

MEMBER OF THE SWISS ACADEMY OF ENGINEERING SCIENCES

Alexandre Pauchard is CEO at CSEM, a Swiss research and technology innovation center developing and transferring new technologies to industry. He leads a team of 650 experts who innovate in precision manufacturing, digital technologies, and sustainable energy.

He joined CSEM in early 2021, after being the CTO and head of R&D at BOBST, a global leader in packaging equipment and services. He also shaped the future of laser, quantum, and optical technologies at startups and SMEs like Synova SA, ID Quantique SA, and Nova Crystals in Silicon Valley. He consulted for Intel's Photonics Technology Lab in California for six years.

He holds a physics degree from ETH Zurich and a PhD in microtechnology from EPFL in Lausanne. He has co-authored 80 publications and 13 patents. He has won several Swiss awards, such as "INDUSTRY 4.0 - THE SHAPERS 2019" and "Digital Shapers 2021". He is a member of the Swiss Quantum Commission, of the Foundation Council of Switzerland Innovation and of SATW, and serves on the boards of EARTO, Silatech SA and the Neuchâtel Chamber of Commerce and Industry.

FOR YOUR NOTES

PROF. MARTIN FUSSENEGGER

DEPARTMENT OF BIOSYSTEMS SCIENCE AND ENGINEERING

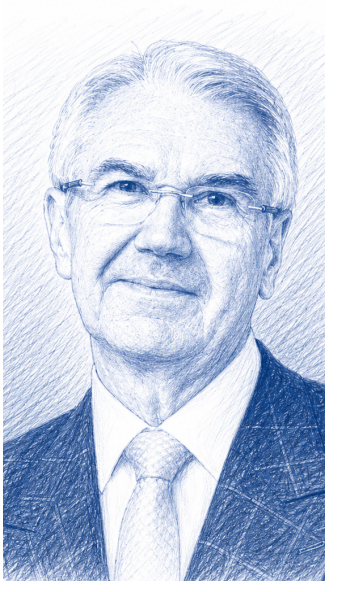
ETH ZURICH - BASEL | UNIVERSITY OF BASEL

MEMBER OF THE SWISS ACADEMY OF ENGINEERING SCIENCES

Martin Fussenegger is a pioneer of synthetic biology and mammalian cell engineering. His research develops programmable cell therapies and closed-loop designer cells for chronic disease control. He is a member of EMBO, SATW, ACATECH, Academia Europaea and the US National Academy of Engineering, and has co-founded Bioversys (SWX:BIOV)

FOR YOUR NOTES

PROF. JEAN-PIERRE MICHEL



PROFESSOR OF MEDICINE

CHAIRMAN OF THE ACADEMIC GERIATRIC DEPARTMENT IN GENEVA UNIVERSITY HOSPITALS TILL 2011

Dr. Michel is an emeritus professor of medicine at Geneva Medical University and an honorary professor of medicine at Limoges University (France) and Beijing University Hospital (China). He served as President of the European Geriatric Medicine Society. He is a full member of the French National Academy of Medicine in Paris. He has authored more than 500 peer-reviewed scientific papers, including the WHO Global report on "Aging and Health" (2015). He is the first editor of the Oxford Textbook of Geriatric Medicine (2017 and 2026). He received the Chinese Foreign Friendship Award (2022) and the inaugural Lifelong Achievement Award from the European Geriatric Medicine Society (2025).

FOR YOUR NOTES

PROF. ADRIAN IONESCU

DIRECTOR OF THE NANOELECTRONIC DEVICES LABORATORY, EPFL

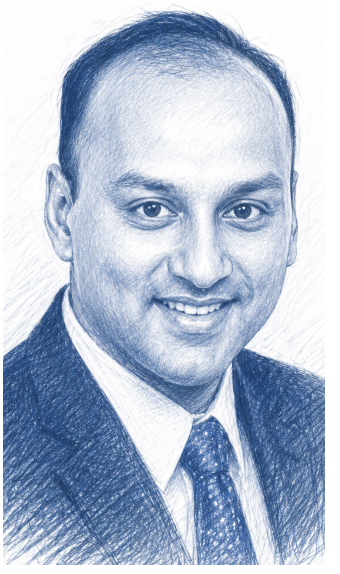
DEAN OF THE SCHOOL OF ENGINEERING (STI / EPFL)

MEMBER OF THE SWISS ACADEMY OF ENGINEERING SCIENCES

Adrian M. Ionescu is a Full Professor at École Polytechnique Fédérale de Lausanne (EPFL), Switzerland, where he serves as Dean of the School of Engineering (STI) since 2025 and Director of the Nanoelectronic Devices Laboratory. His research has pioneered breakthrough technologies including steep-slope transistors, phase-change and Mott devices, integrated biosensors and MEMS resonators for energy-efficient Edge AI and Internet of Things applications. He is also co-founder and Chief Technology Officer of Xsensio, a deep-tech startup developing next-generation wearable biosensing platforms, recognized by Time Magazine among the world's leading pioneers in wearable health technologies. He has received numerous distinctions, including the French André Blondel Medal (2009), the IBM Faculty Award (2013), and the IEEE EDS George Smith Award (2017). He was elected to the Swiss Academy of Technical Sciences (SATW) in 2015 and to Academia Europaea in 2025. His work has been further recognized through major European Research Council grants, including an ERC Advanced Grant (2016), an ERC Proof of Concept Grant (2021), and an ERC Synergy Grant (2023). In 2024, he received the IEEE Cledo Brunetti Technical Field Award for leadership and contributions to energy-efficient steep-slope devices and technologies. He is also a member of the Editorial Board of the Proceedings of the IEEE.

FOR YOUR NOTES

PROF. RYAN CARVALHO



HEAD OF NESTLÉ RESEARCH

Dr. Carvalho is the Head of Nestle Research. He is a trained pediatric gastroenterologist who earned his medical degree from Bombay University, completed his pediatric residency in New York and a clinical fellowship in Pediatric Gastroenterology and Nutrition at Johns Hopkins University. Dr Carvalho holds also an executive MBA from the Ohio State University.

Prior to joining Nestlé , Dr. Carvalho held several positions in academia, most recently as an Associate Professor of Clinical Pediatrics at The Ohio State University, USA.

He is a member of the North American Society of Gastroenterology Hepatology and Nutrition (NASPGHAN) and the American Academy of Pediatrics (AAP) and has served on several boards and committees over the last 10 years. He has written more than 40 articles in peer-reviewed journals and contributed chapters to textbooks and many educational presentations/webinars. In his tenure at Nestle, he has launched innovative products & nutrition solutions in over 100 countries.

FOR YOUR NOTES