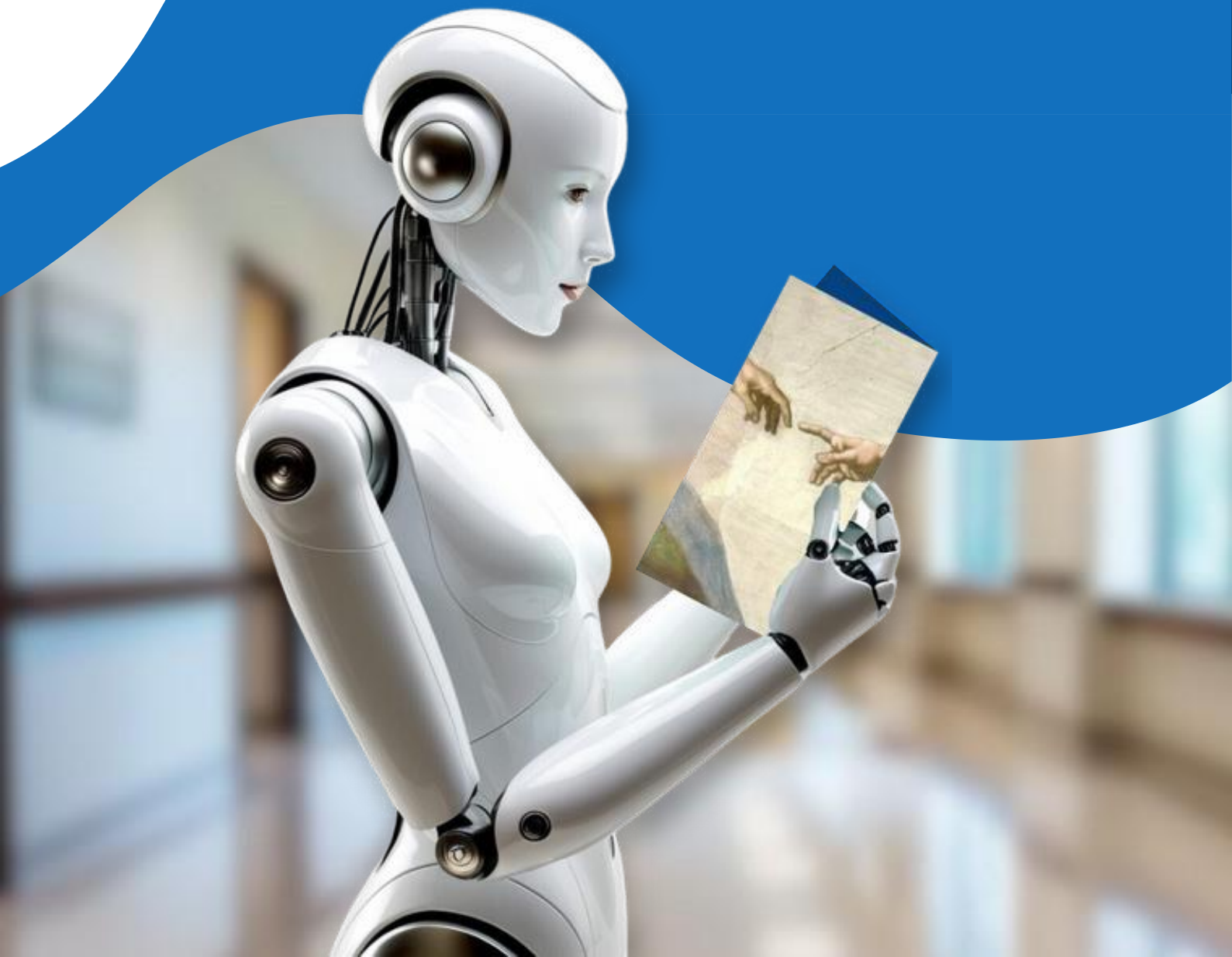
# AI AND MEDICINE

## *THE CHALLENGE OF HUMAN DIGNITY*

## Profiles of Speakers and Moderators
## And
## Abstracts



## Speakers/Moderators (alphabetical order)

# ARS BERNARD

PRESIDENT, INTERNATIONAL FEDERATION OF CATHOLIC MEDICAL ASSOCIATIONS (FIAMC), BELGIUM

## BIOSKETCH

Bernard Ars, MD, PhD is Visiting Professor of Anthropology and Ethics at the University of Namur (Belgium) and President of the International Federation of Catholic Medical Associations (FIAMC).

He is a teaching professor in higher education and physician surgeon, specializing in Ear, Nose and Throat and Head and Neck surgery, in Functional and Occupational Rehabilitation. In his clinical practice, he has an interest in all aspects of otology; deafness and muteness, occupational deafness, congenital malformations, ear infections; but is especially renowned for the treatment of chronic otitis media.
Dr. Arsis a Bachelor of Philosophy and holds a diploma in Theology.

## ABSTRACT

### Opening Lecture

Artificial Intelligence (AI) is a powerful technological advancement that is set to transform not only science, but also society. It has the potential to alter the trajectory of our civilization. It will have a significant impact on the Law, Medicine and the way we order our lives together as Christian communities. Medicine, which operates on traditional understandings of Life and the workings of the Human Body, will be particularly affected by the rapid

development and implementation of AI.

To better understand the real ethical and legal challenges of this technology, at this conference, which focused on Medicine, AI can be better understood as a procedural device, comprising three components: the **collection of data** (“Big Data”), as extensive as possible; the **development of algorithms**, i.e., sequences of instructions and calculations, according to a defined process, leading to a solution, simulating human functions; and finally, the **processing of data by these algorithms**, with the aim of obtaining an accurate, instantaneous result. The objective of this conference is to analyze each of the three components in order to establish and defend Humanism (i.e., the central role and transcendent nature of the individual in space and time, in other words, the dignity of the human person) over and against this new technology.

In this opening lecture, I will discuss: the use of AI in various forms of medical practice and research; the positive and negative aspects of AI for physicians and their relationships with patients; and the two major anthropological challenges of AI in medicine, namely,on the one hand, the fight against the reduction of Human Intelligence to "Artificial Intelligence," and on the other hand, the re-introduction of the "Human" element into an increasingly mechanized relationship between physicians and patients, as well as in medical research.

# BISHOP JEFFREY P.

SAINT LOUIS UNIVERSITY, USA

## BIOSKETCH

Jeffrey P. Bishop, MD, PhD is Professor of Philosophy and Professor of Theological Studies at Saint Louis University (a Jesuit University in the US), where he holds the Tenet Endowed Chair in Bioethics. Bishop is the author of two books: The Anticipatory Corpse: Medicine, Power, and the Care of the Dying (named the most important book published in 2011 by the Australian Broadcasting Corporations Religion and Ethics Page) and Biopolitics After Neuroscience: Morality and the Economy of Virtue (coauthored with M. Therese Lysaght and Andrew A. Michel, and the winner of the Expanded Reason Award in 2021). Bishop's philosophical and theological work sits at the intersection of the philosophy of technology, science, and culture, exploring the metaphysics and ethics of technological devices in relation to culture and the human person.

## ABSTRACT

### From Bioethics to Algor-ethics: Which Principles and Perspectives?

From the late 1950s, theologians and philosophers began to question the ethics of medical research and medical practices. These theological and philosophical engagements started out with thick metaphysical-moral

content, but gradually they became more and more thin in terms of metaphysical-moral commitments. Some thirty years after the Nazi experiments were brought to light, American researchers were still doing highly unethical research, for example the Tuskegee and the Willowbrook experiments. This crisis came to a head in the mid-1970s, prompting congressional and presidential pressure to begin to circumscribe research. A newer breed of scholars, taking on a more "secular" approach, began to look for approaches that neither endorsed specific metaphysical-moral systems, nor collapsed into relativistic chaos.

Those engaged in the scientific enterprise desired a system of ethics that would assure the public that it would not disrupt scientific progress while also not crossing bright ethical lines. Thus, generic approaches to ethics began to be articulated.

One such ethical framework has been called principlism. In the US, the Belmont Report was published in 1978 and established three principles—respect for persons, justice, and beneficence—to guide ethical research practices. Then, in 1979, Tom L. Beauchamp and James

F. Childress—Beauchamp having also been the author of the Belmont Report—established four principles to guide both medical practice and medical research: respect for autonomy, justice, non-maleficence, and beneficence.

Yet, these principles have always proven insufficient and in need of specification, both at the bedside and at the level of public policy. From the late 1970s onward, bioethics has been a major feature of both medical and research ethics education, opening itself to multiple academic disciplines that help to inform the ethics of biomedicine, from philosophy and theology to sociology and anthropology, from literary studies of medicine to legal studies of medicine and bioethics.

In 2018, Paolo Benanti coined a new term and initiated a new way of thinking of the ethics of AI: Algor-ethics. Algor-ethics examines the design and implementation of AI systems with emphasis placed on the creation of accountability and transparency mechanisms. Algor-ethics also encourages stakeholder input as part of the process of system design. The approach seeks to promote fairness and avoid bias and to think in terms of broad principles that can and ought to inform bioethics.

In this paper, I will describe how—in a manner similar to bioethics—algor-

ethics will need to become multidisciplinary in approach, such that the principles can be filled out with more moral content. I will also explore the differences between bioethics and algor-ethics, with emphasis on what has been learned from bioethics and what algor-ethics needs to consider.

Finally, I will show that, at best, AI can only accumulate and reassemble knowledge. It can only enact a thin, formalistic moral ontology. Drawing on the work of Henri Bergson on the role of *memory* and the role of (moral) *intuition*, as well as on Bernard Lonergan's work on *insight*, I will argue that AI's knowledge, however broad or deep it may be, is not wisdom. We must supplement algor-ethics with the richness of philosophical and theological anthropology.

# BOROVECKI ANA

SCHOOL OF PUBLIC HEALTH ANDRIJA ŠTAMPAR, CROATIA

**BIOSKETCH**

Head of the Department of Social Medicine and Organization of Health Care, School of Public Health “Andrija Štampar”, University of Zagreb. Specialising in clinical pharmacology, toxicology, and bioethics, she holds a PhD from Radboud University Nijmegen and a European Master in Bioethics from KU Leuven. Her work spans ethical oversight (ethics committees), research integrity, teaching, and public health policy. Since January 2025, she serves as President of the European Society for Philosophy of Medicine and Healthcare (ESPMH).

# BRÜHL LUDWIG

SENIOR ASSOCIATE CONSULTANT AT KPMG, GERMANY/AUSTRIA

**BIOSKETCH**

Ludwig Brühl works as Senior Associate Consultant at KPMG, where he is part of the Public Sector Consulting Team. In his role, he mainly advises German Catholic dioceses in administration, process optimization and strategic resource allocation. He previously served as Communications Officer at the human rights organization ADF International in their headquarters in Vienna. Brühl is an active member of various pro-life organizations across Germany and Austria.

# CARRARA ALBERTO

PONTIFICAL ATENEO
“REGINA APOSTOLORUM”
ITALY

## BIOSKETCH

Alberto Carrara is a priest, scientist, philosopher, neurobioethicist, and chemical-biological laboratory technician. He is a doctor in Medical Biotechnology at the Faculty of Medicine and Surgery of the University of Padua. He has a master’s degree in Philosophy, PhD in Philosophy of Mind and Neuroethics and bachelor’s degree in Theology. He is visiting professor of Philosophical Anthropology and Neuroethics at the Faculty of Philosophy of the Pontifical Athenaeum Regina Apostolorum in Rome and the European University of Rome (EBU); Coordinator of the Research Group in Neurobioethics (GdN); Fellow of the UNESCO Chair in Bioethics and Human Rights.

## ABSTRACT

**AI and Medicine. The challenge of human dignity and hope.**

As artificial intelligence continues to transform the landscape of medicine, it invites not only technical and ethical scrutiny but also profound theological and anthropological reflection. This presentation explores the foundational question: what does it mean to uphold human dignity in an age when machines are increasingly involved in decisions about human health and life?

Rooted in a Christian vision of the human person as imago Dei – endowed with intrinsic worth, relational capacity, and transcendent openness – this talk examines both the promises and perils of AI in medicine.

While such technologies hold potential for enhanced diagnostics, personalized care, and increased accessibility, they also risk promoting reductionist views of the person, instrumentalizing life, and deepening existing inequalities.

Beyond a logic of fear or fascination, this reflection proposes a theological anthropology capable of engaging the digital age with discernment. It underscores the virtue of hope, not as naive optimism, but as a theological stance that inspires critical vigilance, fosters creative solidarity, and orients innovation toward integral human development.

By integrating ethical analysis with Christian humanism, the talk aims to illuminate a path forward in which AI serves medicine without compromising the dignity and mystery of the human person.

# ČIVLJAK ROK

UNIVERSITY OF ZAGREB, CROATIA

## BIOSKETCH

Prof. Rok Civljak, M.D., Ph.D., is a specialist in infectious diseases, paediatric infectious diseases, and a subspecialist in critical care medicine. He is the head of the Department for Respiratory Tract Infections of the University Hospital for Infectious Diseases “Dr. Fran Mihaljevic”, an associate professor at the Department of Infectious Diseases of the University of Zagreb School of Medicine, and a member of the National Hospital Infection Control Advisory Committee, Zagreb, Croatia. He completed his M.D. (1994) and Ph.D. degrees (2014) at the University of Zagreb School of Medicine. Since 1997, he has worked at the University Hospital for Infectious Diseases “Dr. Fran Mihaljevic” in Zagreb. He was awarded by the Croatian Medical Association (2008) and the World Federation of Catholic Medical Associations (2022).

# DEFILIPPIS VINCENZO

PAST PRESIDENT, EUROPEAN FEDERATION OF CATHOLIC MEDICAL ASSOCIATIONS (FEAMC), ITALY

## BIOSKETCH

Vincenzo Defilippis specializes in Internal Medicine and Forensic Medicine, specifically Health Services Planning, Organization and Management, and in Bioethics at the Catholic University of Rome. He is Director of the Unit of Forensic Medicine, Clinical Risk Management, Quality System and Training and Director of the Safety and Quality Department at the Provincial Health Authority (ASL) of Bari. 2005-2012, he served as Medical Director of the IRCCS for Gastroenterology in Castellana Grotte. Since 2012, he has been a member of the ASL Bari Claims Evaluation Committee and currently chairs the Disciplinary Proceedings Office. He is contract Teacher of Forensic Medicine at the School of Medicine, University of Bari, and Lecturer at the Postgraduate Programs of the Luiss Business School. He also teaches at the Faculty of Economics, LUM University. His research focuses on Forensic Medicine and Clinical Risk.

## ABSTRACT

**Enhancing Medical Decision Making with Responsible AI – A Case Study from Italy.**

Artificial intelligence (AI) is quickly transforming clinical practice by enabling clinicians to synthesize complex medical knowledge into actionable

insights with greater speed and scalability. While AI can make care more efficient, informed, and patient-centred, its responsible implementation is essential to ensure it supports—rather than undermines—human dignity and clinical autonomy.

ASL Bari, one of Italy's largest and most complex healthcare organizations, has taken a leading role in exploring this potential. With approximately 5,000 clinicians—including physicians, nurses, and pharmacists—serving a diverse patient population across hospital and territorial care settings, ASL Bari faces, like many modern healthcare services, a growing demand for timely, accurate, and trustworthy clinical information in an increasingly complex care environment. In response to this need, following a successful pilot, ASL Bari has adopted an AI-driven clinical decision support tool, ClinicalKey AI, that provides evidence-based information directly at the point of care.

ASL Bari's approach to AI adoption is guided by its commitment to ethically driven innovation, clinical autonomy, and the safeguarding of professional integrity. To ensure alignment with ASL Bari's mission and the principles of responsible AI implementation in healthcare, a case study is currently underway to evaluate the early impact of ClinicalKey AI in practice.

Using a mixed-methods approach with user surveys and qualitative interviews, preliminary results indicate that the tool reduces clinicians' information search time, increases confidence in clinical decision-making, and fosters continuous learning- without diminishing clinical autonomy.

This keynote will detail the journey ASL Bari is undergoing, highlight key outcomes from the study, and discuss lessons learned regarding responsible AI adoption in healthcare. By sharing our experience, we aim to contribute to the broader dialogue on how AI can be harnessed to enhance medical decision making while safeguarding human dignity and professional integrity.

# DIOGO FERREIRA MARTINS JOSÉ

PORTUGUESE CATHOLIC UNIVERSITY, PORTUGAL

## BIOSKETCH

José Diogo Ferreira Martins holds a medical degree and a Ph.D. from the Faculty of Medical Sciences, NOVA Medical School. He also earned a Master's in Medical Education from the Portuguese Catholic University and completed part of his medical training at Boston Children's Hospital, Harvard. He works as a Senior Resident in Pediatric Cardiology at Hospital de Santa Marta and is the coordinator of the same specialty at Hospital Lusíadas.

He is the author of over 50 articles in indexed medical journals and several book chapters in Pediatric Cardiology, and is also co-author of a book on medical ethics. He has received several awards and grants.

# FRANCESC GARCÍA CUYAS

INSTITUTO DE DIAGNÓSTICO POR LA IMAGEN (IDI), GENERALITAT DE CATALUNYA, SPAIN

## BIOSKETCH

Dr. Garcia Cuyàs, M.D., Ph.D. is the Managing Director of the Institut de Diagnòstic per la Imatge (IDI). A specialist in General and Digestive Surgery, he previously served as Director of Digital Strategy and Data at Hospital Sant Joan de Déu, Barcelona. He is a board member of the Catalan Society of Digital Health of which he was the founder and president. He was Associate Professor of Surgery at the Autonomous University of Barcelona and the University of Vic – Central University of Catalonia (UVIC-UCC),. His career includes leadership roles as Director of the TICSalut Social Foundation, General Coordinator of ICT of Department of Health in Catalonya, Head of the Chair of ICT and Health at UVIC-UCC, and Head of the Technical Secretariat and Information Systems of the Catalan Health Institute. His expertise lies in healthcare innovation, digital transformation, and strategic management in health systems.

## ABSTRACT

**Artificial Intelligence and Personalized Medicine: an Opportunity to Better Care for the Most Vulnerable.**

Artificial intelligence is transforming the way we understand and practice medicine. For decades, healthcare has been built on general protocols,

designed for large groups of patients. But every person is unique, and this is especially true for vulnerable populations such as children with rare diseases or patients with complex chronic conditions. For them, “one-size- fits-all” solutions are not enough. They need care that is adapted to their reality, sensitive to their needs, and able to anticipate changes in their health status.

Artificial intelligence opens a window of opportunity to move toward truly personalized medicine. By integrating multiple sources of information — clinical, genomic, social, and lifestyle data — it is now possible to build models that not only describe but also predict and prevent. This is not only about improving diagnosis or choosing the right treatment, but also about accompanying each patient throughout their life journey, with proactive, continuous, and context-aware care.

Within this vision, the home becomes a central space. Home is not only a physical place; for many vulnerable patients, it is their main zone of comfort, the environment where they feel safe, surrounded by their routines and loved ones. Bringing part of healthcare into this environment has a profound impact on well-being. Remote monitoring, supported by connected devices and smart sensors, makes it possible to collect real-time information about a patient’s health. But what is truly transformative is when artificial intelligence analyzes that data and, through predictive models, anticipates decompensations or detects early warning signals. This can prevent hospitalizations, reduce the need for travel, and promote greater autonomy for patients and families.

The new generation of generative AI agents is also set to play a leading role in this transformation. Through natural language interfaces, these agents can accompany patients and caregivers, resolve doubts instantly, provide emotional support, and guide them in following treatments. For professionals, their value is equally significant: they can generate clinical summaries, filter complex information, suggest treatment plans, and continuously integrate the latest scientific evidence into clinical practice.

The combination of these technologies should not be seen as a substitute for healthcare professionals but as an ally that amplifies their capabilities. When designed with an ethical and human-centered approach, artificial intelligence can help us to humanize medicine. It offers the possibility of being closer to those who need us the most, not only in hospitals or clinics but also in their homes, in their everyday environments, where they feel safest.

In short, artificial intelligence and personalized medicine represent a unique opportunity to transform models of care for the most vulnerable. They enable us to move from a reactive system — one that acts when disease has already manifested — to a proactive and preventive model that accompanies, predicts, and cares. And most importantly, they give us the chance to offer medicine that is not only more precise, but also more equitable, more compassionate, and more human.

# IÑIGO PETRALANDA MARIA ISABEL

PONTIFICAL CATHOLIC UNIVERSITY OF ARGENTINA

## BIOSKETCH

Prof. Iñigo Petralanda is a Senior Lawyer and Bioethicist from the Pontifical Catholic University of Argentina (UCA), where she teaches in the Master's in Bioethics, chairs the Chapter on Artificial Intelligence, Health Data Governance, and Digital Health Path at the Institute of Bioethics, and serves as Coordinator of the Research Ethics Committee. She also participates in hospital and research center ethics committees, with a strong focus on validating the ethical, legal, and operational dimensions of data-driven technologies integrated into healthcare. She is an expert in the governance and regulation of digital health and artificial intelligence, advancing the Personalist Bioethics Model to promote human dignity, patient safety, and responsible innovation in biomedical research and health systems. Among her achievements is the introduction of Personalism into coalitions and digital ecosystems of emerging and converging technologies through the Digital and Informed Consent (CIED) tool, applied in interoperable health environments. She has also implemented the analytical framework of Persona, State, Science, and Technology for dignified development. In addition, she has a strong background in health economics, health technology assessment, and applied health informatics, which reinforces her multidisciplinary approach to digital health and bioethics. She is also a partner at MG Consultores, a consultancy firm specializing in the implementation and integration of digital solutions in accordance with ethical, legal, and operational compliance frameworks for technology transfer.

**ABSTRACT**

**Organizational Impact of Artificial Intelligence on Healthcare Systems.**

This presentation offers a critical reflection on the organisational impact of artificial intelligence (AI) on healthcare systems, with a particular focus on institutions which, as is often the case in Latin America, combine research and clinical care functions within fragmented, unequal, and technologically dependent environments.

The analysis is structured around three fundamental axes: the Person, the State, and Science/Technology in development. Each axis is examined through three interrelated dimensions: ethical, legal, and operational-informatic (medical-informatic). From the perspective of personalist ethics, it is affirmed that institutional decisions involving AI must be guided by the imperative to safeguard human dignity, recognising the person as both subject and ultimate end of every healthcare structure.

Latin America faces a particular challenge, as the implementation of AI in healthcare often relies on external funding or digital platforms operating under foreign jurisdictions. This dependency creates tensions concerning informational sovereignty and weakens local capacities for technological governance. Furthermore, it complicates collaboration between public and private actors within fragmented digital ecosystems marked by limited interoperability and insufficient sustained investment.

In this context, the responsible adoption of data-driven technologies, such as AI, requires healthcare institutions to uphold two foundational pillars: the quality of clinical practice and the effectiveness of healthcare outcomes. These criteria enable institutions to discern whether a particular health need can be adequately addressed through such technologies, especially when mediated by artificial intelligence integrated into a defined organizational design.

The challenge also extends to the ethical and legal frameworks within which these technologies operate. The role of institutional bodies such as Research Ethics Committees, Patient Safety and Health IT Quality Committees, and national regulatory agencies is not to hinder innovation, but to ensure that it aligns with the common good, upholds fundamental rights, and protects the most vulnerable. This necessitates robust data governance frameworks that clearly define the flow, use, and stewardship of health data, as well as the implementation of digital, explicit, and context-sensitive informed consent

procedures—applicable to both clinical care and secondary use in research.

Within this landscape, healthcare institutions require a clearly defined digital health path—a structured process that governs the development, validation, integration, and monitoring of AI- based technologies within health systems. Such a path must align technical innovation with ethical and regulatory safeguards, ensuring that new tools are not only efficient but also clinically meaningful and socially just.

On these foundations, Health Technology Assessments (HTAs) emerge as critical organizational instruments—not only for establishing cost-effectiveness thresholds but also for embedding ethical judgement in the prioritization of innovative resources. However, the region has yet to achieve a level of normative, economic, and informatic maturity sufficient to align its fragmented healthcare systems with a realistic vision of universal digital health coverage.

Finally, the presentation outlines concrete proposals for healthcare organisations engaged in both research and care delivery. These include the creation of dedicated ethics committees for AI; the implementation of algorithm validation and oversight protocols; the integration of health IT quality standards; interdisciplinary professional training; and the development of traceability and algorithmic governance schemes that remain firmly centred on the human dignity of the person.

# KLOIBER OTMAR

PAST SECRETARY GENERAL,
WORLD MEDICAL ASSOCIATION,
FRANCE

## BIOSKETCH

Dr Otmar Kloiber has served as Secretary General of the World Medical Association since 2005, following his departure from the German Medical Association as Deputy Secretary General. He holds an MD (1984) and a PhD (1986) from the University of Cologne, was a postdoctoral fellow in the Department of Biochemistry at the University of Minnesota, Duluth, and a scientific research fellow at the Max Planck Institute for Neurological Research. He holds an honorary doctorate from the Victor Babes University, Timisoara, Romania and was appointed Clinical Professor in Health Administration at the Brooks College of Health, University of North Florida, from 2009 to 2013. He is interested in the development of deontology under the influence of health system organization and its relation to the provision of medical care. He provided advice to numerous governments on medical ethics and socio-medical issues. His advocacy focus is on ensuring equitable access to quality healthcare for all people.

# KOENES CHRISTINA

TECHNICAL UNIVERSITY
OF MUNICH, GERMANY

## BIOSKETCH

Christina Koenes, M.A. is a physician and philosopher with a background in medical ethics and anthropology. After completing her medical and philosophy studies in Munich, she now works as a general practitioner. Her research focuses on palliative care, assisted suicide and suicide prevention, as well as the ethical challenges of AI in medicine. She is the author of „Der Mensch als Geschöpf und Gabe“ (The Human Being as Creature and Gift, Traugott Bautz, 2024) and was awarded a scholarship by the Hanns-Seidel-Foundation. Beyond her clinical and academic work, she plays a leadership role in Catholic initiatives such as the Loretto community in Munich and is engaged in interdisciplinary forums with a special focus on ethical education for young heathcare professionals.

# KUTTY SHELBY

BAYCARE HEALTH SYSTEM, USA

## BIOSKETCH

Dr. Shelby Kutty, MD, PhD, MHCM is System Vice President and Chief Academic Officer at BayCare Health System, Clearwater, Florida. He earned his MBBS from the University of Calicut, MD from Manipal Academy of Higher Education, PhD from the University of Nebraska Medical Center, and a Master's in Healthcare Management from Harvard University. Previously, he held the Helen B. Taussig Professorship at Johns Hopkins School of Medicine, chaired the Cardiovascular Analytic Intelligence Initiative, and served as vice chair of pediatrics at the University of Nebraska Medical Center. A recognized expert in multimodal cardiovascular imaging, Dr. Kutty has published over 500 peer-reviewed articles and is active in international healthcare collaborations in Brazil, India, and China.

## ABSTRACT

### From Diagnostic to Prediction for Cardiovascular Disease in North America

Cardiovascular imaging has long been central to diagnosis and management, but in the era of artificial intelligence (AI), it is being redefined. Imaging is no longer limited to descriptive snapshots—it is becoming a foundation for predictive models that anticipate patient trajectories. This transformation, from diagnosis to prediction, is ultimately a story about big data. Echocardiography and other imaging modalities generate vast amounts of

information at high speed and across multiple formats, creating both promise and challenge. To realize its value, we increasingly rely on machine intelligence, which provides powerful methods for organizing, analyzing, and converting raw images into actionable insights. The perspective shared here draws on recent North American experience, where large imaging datasets and multidisciplinary collaborations have accelerated this work.

Practical applications are already visible. Neural networks can identify structural abnormalities, segment chambers, and discriminate between conditions that mimic one another. Convolutional models quantify heart chamber volumes, measure functional parameters, and even predict outcomes such as hospitalization or arrhythmia. New wearable devices extend the reach to continuous, real-time monitoring. Together, these advances illustrate how AI can improve precision, efficiency, and scalability in cardiovascular care. The greatest potential, however, lies in prediction. By combining imaging with clinical and biomarker data, AI can forecast risks, support therapy selection, and enhance personalized care. This approach can potentially move beyond traditional evidence-based medicine, which relies on homogeneous clinical trial cohorts, toward "medicine-based evidence," where real- world patient data and advanced analytics guide individualized treatment. Concepts such as digital twins—virtual patient models simulating responses to therapies—underscore the promise of this evolving direction, particularly in rare or complex cardiovascular diseases.

Challenges remain. AI models require high-quality data, constant updating, and rigorous validation. Many operate as "black boxes," raising concerns about transparency and trust. Ethical issues include maintaining informed consent, protecting privacy, and avoiding biases that disadvantage vulnerable populations. Legal questions involve liability, regulation, and ownership of algorithms. Most importantly, clinicians must ensure that technology does not erode patient dignity or reduce care to machine outputs.

In conclusion, AI is reshaping cardiovascular imaging from diagnosis toward prediction, offering transformative potential while demanding thoughtful stewardship. The opportunity ahead is profound, but so too is the responsibility: to embed innovation within an ethical framework that safeguards trust, fairness, and human dignity.

# LAMBERT DOMINIQUE

UNIVERSITY OF NAMUR, BELGIUM

## BIOSKETCH

Dominique Lambert was born in 1960. He got a *PhD in Physics* and a *PhD in Philosophy* at the *Université Catholique de Louvain.* He is Full Professor at the *University of Namur*, Belgium and at the Interdiocesan Seminary of Namur. He was also visiting professor at the Faculty of Theology of the *Université Catholique de Louvain.* He is a Member of the *Classe des sciences* of the *Académie Royale de Belgique,* (Belgian Royal Academy) and Member of the *International Academy for Philosophy of Sciences*. His research areas are: Ethics of AI and Robotics, History of Science (He wrote the first biography of Msgr Georges Lemaître, the "Father" of Big Bang Theory) and "Science and Faith" studies. He is collaborating with the Mission of the Permanent Observer of the Holy See to the UN (Geneva) as an expert in the field of Ethics of AI and Autonomous Robotics.

## ABSTRACT

### How Artificial Intelligence Is Transforming Human Relations in Medicine? An Ethical Approach to New Kinds of Patient-Doctor Relations

From the side of patients, as well as from the side of Doctors, we will first describe briefly how AI methods are deeply modifying the medical relation, emphasizing the anthropological and ethical issues addressed by this

modification. Afterwards, and without denying the benefits of AI systems uses, we will show why Patient-Doctor relations cannot be framed only by AI technological mediations. We will establish that fact thanks to an epistemological analysis of AI technological structure stressing that important and crucial dimensions of medical relation cannot be adequately reproduced or even simulated by algorithmic procedures. This will stimulate our proposition of an ethical approach, aiming to promote the respect of these deep non-technological dimensions of Patient-Doctor relations and to guide a more humane AI use at the heart of medical relation.

# LANE JOHN

MAYO CLINIC, USA

**BIOSKETCH**

Dr. John I. Lane, M.D. is a neuroradiologist at the Mayo Clinic, Rochester, Minnesota. He holds an MD from Jefferson Medical College, completed his residency in Diagnostic Radiology at Reading Hospital, and a fellowship in Neuroradiology at Thomas Jefferson University Hospital. Dr. Lane is board certified in Diagnostic Radiology and Neuroradiology. His clinical and research interests include imaging of the middle and inner ear, temporal bone computed tomography (CT), MRI, and orbital imaging. He has authored many peer-reviewed papers, and received awards for imaging work in otology, neuroradiology, and related fields. Dr. Lane currently serves as vice-president of FIAMC.

# MONLEZUN DOMINIQUE

MAYO CLINIC, USA

## BIOSKETCH

Dominique J. Monlezun, M.D., Ph.D., Ph.D., MPH: physician-data scientist, AI ethicist, and member of the Mayo Clinic consultant staff in Hospital Internal Medicine. He has two AI- focused PhDs in Global Health Management & Policy, and Global Bioethics. He spent time providing medical care to the underserved rural Louisiana communities. He now cares for hospitalized adults with acute health conditions, specifically cardio-oncology. He is a Professor of Bioethics for two UNESCO-affiliated universities, and an Adjunct Assistant Professor in Cardiology for UT MD Anderson Cancer Center and Chief Data Scientist for Global System Analytics & Structures. He has authored over 400 peer-reviewed papers, conference presentations, and 6 textbooks attempting to advance global AI-driven and person-centered improvements in population health, policy, and ethics.

## ABSTRACT

**Responsible AI: Multicultural Digital Platforms and Public-Private Partnerships in Medicine and Public Health.**

Despite the increasing advances and adoption of artificial intelligence (AI) in medicine, most patients and experts in the high-income countries of the

Global North doubt it will be safe and responsible, while most of the low- and middle-income countries in the Global South are facing growing disparities and cultural divergence in medical AI. North-South public-private partnerships in digital platforms are emerging as a promising collaborative countermeasure to democratize full stack responsible health AI.

By uniting the scientific, economic, and ethical dimensions, this is the first known comprehensive computational analysis of and recommendations for public-private partnerships in multicultural health AI platforms uniting medicine, public health, and global health. It is produced by a novel methodology: the first AI-automated systematic review and policy analysis of and recommendations for the above topic is generated by a publicly available generative AI (step 1), then adjudicated by the world's first triple doctorate-trained physician-data scientist and AI ethicist (step 2), and finally codified after a multi-year multilateral discussion of a cultural and geographic plurality from the Global South and North that includes patient populations, health workers and executives, academics, policy-makers, AI engineers, corporate leaders, and government officials.

This end-to-end analysis demonstrates that consensus estimates project AI will add $15.7 trillion to the global GDP by 2030, while annually saving over a quarter of a million lives and slashing $1 trillion in costs off the healthcare sector worldwide (especially through optimized preventive healthcare like cancer screenings and equitable public health like improving infectious disease spread, worker wellbeing, and maternal and child health). AI platforms are expected to continue to hold their dominance as the primary delivery mechanism of best-in-class health AI (especially through leading AI companies partnering with countries, universities, public health agencies, and healthcare systems to co-design the economically, ecologically, and ethically sustainable design, infrastructure, deployment, education, upskilling, and governance of responsible AI). These platforms are investigated as pragmatic critical digital enablers of healthcare systems and public health agencies expanding populations' affordable access and equitable health outcomes, as part of a broader human security-based managed strategic competition of rival political economic blocs amid rising conflicts, debt, and resource scarcity.

Recommendations are generated implementing this multidimensional, multi- sector, and multi-cultural approach to human-centered responsible AI

as integral sustainable development, as embodied by the Pontifical Academy for Life's 2020 Rome Call for AI Ethics (the first multi-sector and interreligious consensus on AI ethics, which built explicitly on the inter-government and inter-religious global consensus of the United Nations' 1948 Universal Declaration of Human Rights). Several leading use cases are highlighted to practically demonstrate promising enterprise-wide AI and sovereign AI to scale these innovations, anchored in human dignity, fulfilled in the common good, and preparing a future more worthy of the global human family.

# PALAZZANI LAURA

LUMSA UNIVERSITY, ITALY

## BIOSKETCH

Full Professor of Philosophy of law and Biolaw at Lumsa University in Rome; member of the Steering Committee of the Pontifical Academy for Life; member of the Commission for Ethics and Integrity in Research of the National Research Council; member of the Ethics Committee at Bambino Gesù Hospital in Rome; vicechair of the Scientific Society of Philosophy of Law in Italy. Former member of Bioethics Committees at national and international level.

## ABSTRACT

### AI, Human in the Loop and Responsibility

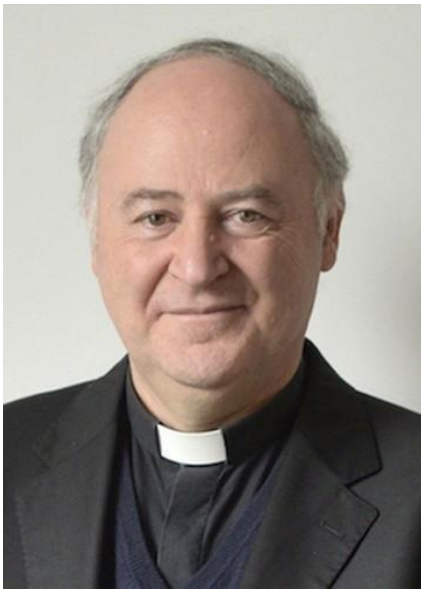
The rapid development of Artificial Intelligence (AI) and the increasing complexity of AI models, especially machine learning, challenge traditional ethical and legal frameworks and raise questions about meaningful human control and oversight, accountability, and responsibility. As AI systems more frequently influence decision-making in areas such as healthcare, finance, and justice, it becomes essential to define the role and meaning of being 'in the loop' and, consequently, who is responsible for their outcomes to ensure trustworthy AI. Maintaining human control remains crucial to avoid the potential problem of excessive 'technological delegation.' An expert system that is optimal in suggesting "decisions" to humans poses the

danger of reducing human attention, which could lead to the weakening of human skills (the so-called phenomenon of de-professionalization and deskilling) and move towards the artificialization or automation of choices that may diminish or even eliminate interpersonal relationships. Therefore, it is vital to regulate productive synergy as a form of complementarity between humans and machines, seeking ways of intelligent "support" that enable a human being to exercise "meaningful human control" through attention, contribution, and oversight.

To build trustworthy AI, we need high 'data quality' (beyond just the volume provided by 'big data'), specifically, accuracy in data collection and 'quality algorithms' that are explainable and inclusive or free from discrimination — considering factors such as age, gender, and ethnicity. AI should be regarded as an aid to human decision-making, serving a consultative role. It functions as an "automated cognitive assistance" system, not an "autonomous decision-making system."

It gathers data, compares it with statistics, and speeds up analysis processes. In this context, machines cannot replace humans; instead, they should foster a relationship based on the collaboration of autonomous and responsible areas. Delegating complex tasks to intelligent systems can weaken human qualities and diminish the quality of relationships.

Developers, producers, users, and organizations share responsibility to ensure AI is designed and implemented ethically. Regulatory bodies are currently discussing how to assign liability in cases of harm or bias caused by AI. Trustworthy AI depends on transparent governance and responsible innovation. Interdisciplinary collaboration throughout the AI system’s lifecycle is essential to develop frameworks that align technological capabilities with societal values and fundamental human rights.



# PEGORARO RENZO

PRESIDENT,
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**BIOSKETCH**

Msgr. Renzo Pegoraro is President of the Pontifical Academy for Life.

He graduated in Medicine and Surgery from the University of Padua in 1985. He was ordained a priest for the Diocese of Padua in 1989. He studied Philosophy and Theology, obtaining a Licentiate in Moral Theology and a Diploma from the Advanced Course in Bioethics. In 1993, he became Professor of Bioethics at the Theological Faculty of Northern Italy and Secretary General of the "Lanza Foundation". Since 1998, he has been a member of the European Society for Philosophy of Medicine and Healthcare, serving as its president from 2005 to 2007. Since 2000, he has been a Professor of Nursing Ethics at the “Bambino Gesù” Pediatric Hospital in Rome. He is a member of the European Association of Centres of Medical Ethics, of which he served as president from 2010 to 2013. He is also a member of the International Association for Education in Ethics.

# POULLET YVES

UNIVERSITY OF NAMUR, BELGIUM

## BIOSKETCH

Prof. Yves Poullet, LL.D. is Emeritus Professor of Law at the University of Namur, where he served as Rector from 2010 to 2017, and was also a faculty member at the University of Liège. He is the founder and long-time Director of the Centre for Research in Information, Law and Society, recognized internationally for its pioneering work on ICT law and ethics. His research covers privacy, data protection, freedom of expression, internet governance, and the legal and ethical implications of emerging technologies, including artificial intelligence. He has published over 500 scientific works, and has contributed extensively to policy debates in Europe and beyond. Prof. Poullet has served as an expert adviser to the European Commission, the Council of Europe, and UNESCO, sits on editorial boards of leading journals, and is a member of the Royal Academy of Belgium.

## ABSTRACT

### What Rights for Artificially Intelligent Medicine?

Digital technologies — the Internet of Things, artificial intelligence (whether embodied by robots or not), genomics, NBICs, and neurotechnology — are multiplying the amount of collected data and

radically transforming both the tools of healthcare and their performance, including predictive capabilities. Beyond that, they are reshaping access to products and services born from these technologies, as well as the relationship between medical professionals and "patients," now increasingly mediated by technology.

This transformation is accelerating the shift from a purely therapeutic approach to one focused on well-being and human enhancement. Furthermore, it is supported by the creation of networks through which medical data are shared, and by the emergence of new actors, particularly Big Tech companies.

What regulatory framework can be envisioned in response to the risks created by these technologies — such as, traditionally, dehumanization, discrimination, infringements on freedoms (especially privacy), but also on freedom of thought, our human identity, and even that of future generations?

Based on recent documents (EU, OECD, UNESCO, Council of Europe), the discussion will address the principles of "human guarantee," the social responsibility of innovation stakeholders, multistakeholder dialogue and evaluation, the recognition of "neuro-rights," and more.

The conclusion will recall the values enshrined in bioethical texts, particularly the meaning of the notion of dignity in the age of AI and neuroscience, and the need for closer alignment between info-ethics and bioethics.


# RAJ TONY

ST. JOHN RESEARCH INSTITUTE/ST. JOHN'S MEDICAL COLLEGE, INDIA


## BIOSKETCH

Dr. Tony Raj is Dean of St. John's Research Institute, Bangalore, and Professor of Physiology at St. John's Medical College, where he has been on faculty for 30 years. He heads the Division of Medical Informatics and has over two decades of experience in digital health. His research spans metabolic physiology, body composition, and insulin sensitivity, as well as digital health interventions and point-of-care diagnostics for resource-limited settings. He served as Chief of Information Technology at St. John's (2010–2015), leading its digital transformation, and was a lead architect of India's National Health Portal. He advises the Government of Karnataka on technology-enabled healthcare, serves on the leadership group of the University of California– Global Health Institute's GloCal Fellowships, and is a founding Director of the St. John's Health Innovation Foundation.

## ABSTRACT

**Advancing Equitable Healthcare in India through AI: Innovations, Use Cases and Challenges.**


India is a large country with a population of about 1.46 billion people where 65% live in rural areas and 35% in urban areas. While urban communities have access

to advanced healthcare facilities and quality healthcare, huge disparities exist with access to basic healthcare facilities and quality healthcare in rural settings. Although many Government initiated health schemes exist, the enormity of the healthcare burden poses a challenge in India. With rapidly emerging technologies such as wearables, point-of-care devices, and Artificial Intelligence, there is a huge opportunity to leverage these technologies to provide affordable, accessible and quality healthcare in rural settings. The India AI Mission approved in 2024 by the Govt of India, provides the thrust required for AI implementation in several domains including Healthcare.

Using cases of AI implementation for healthcare in rural and underserved settings in India has the potential to improve health equity. AI algorithms that can screen Tuberculosis from Chest- X-rays, enabling early detection of TB is affordable and accessible. An AI based solution developed by St. John's Research Institute to detect preterm babies' temperatures and compliance to Kangaroo Mother Care was tested successfully in South India. Similarly, there are AI based applications using mobile devices for screening oral cancer, cervical cancer, breast cancer, dermatological and ophthalmological conditions. These solutions facilitate early diagnosis in underserved communities at affordable costs. AI based drone delivery of medications and transport of blood samples are also being implemented in India for terrains that are difficult to access by roads.

While all these applications have great potential to advance equitable healthcare services in diverse underserved populations, we must recognize and be cognizant of the several challenges that accompany the development of AI technologies. These challenges could involve data that drives AI algorithms such as data availability, data bias, data reliability, data harmonization and standards, privacy and security and the ethics of data collection for AI development. Other challenges include fragmented digitization in healthcare settings, lack of adequate infrastructure to support digitization and AI, and connectivity challenges to access the internet. AI adoption in healthcare settings could pose another challenge, either due to lack of training, awareness, cultural or contextual mismatches, and mindset issues.

AI technologies have tremendous potential to help advance equitable healthcare in a Country like India with a potential to empower its diverse underserved communities in rural settings. Appropriate guardrails, rigorous validations and clinical trials and adherence to ethical principles in AI development will pave the way for successful AI healthcare implementations in LMICs.

# SANTOS PEREIRA JOÃO

PORTUGUESE CATHOLIC UNIVERSITY, PORTUGAL

## BIOSKETCH

João Santos Pereira is an Associate Professor of Biostatistics at Católica Medical School, where he also serves as the Executive Director. His responsibilities include the financial and operational management of the School, as well as the definition and implementation of strategies for internationalization, digitalization, and executive education focused on innovation and entrepreneurship. Additionally, Santos Pereira also serves as a member of the Digital Ethics Laboratory team of Universidade Católica Portuguesa (UCP). Previous roles include Head of Innovation at UCP, CFO and Board Member at HeartGenetics, a bioinformatics company, and Special Advisor for science and education at the Portuguese Parliament. He holds a PhD in Brain Imaging from the University of Cambridge and a Licenciate in Electronics and Computer Engineering from Lisbon Technical University.

## ABSTRACT

**From Experiences to Positive Impacts and Problematic Issues.**

Across the world, AI is enhancing medical practice. From clinical decisions to equitable healthcare, from diagnostics to disease prediction, the

capabilities of AI, as well as of more specific machine learning algorithms, are paving the way for a new era in medicine. At long last, medicine can truly become predictive, preventive, personalized, and participatory. Positive impacts include robust clinical decision support systems that improve decision making and patient care, as well as pattern recognition abilities that are invaluable in complex diagnoses and novel research paths. Social impacts are also being felt, with healthcare becoming more equitable and efficient due to cheaper and quicker drug discovery processes, increased patient engagement, and health data interoperability. Patients from all backgrounds and socio- economic contexts can access timely diagnoses, clear prognoses and personalised therapies adjusted in near real-time. These upsides, however, do not come without issues, notably ethical. For instance, whereas the data interoperability is a boon for efficiency, the free flow of private health data across different systems, from clinics to insurers and governments, poses serious questions about privacy, profiling, and ownership. Another key issue is transparency and explainability in AI, which is of extreme importance in healthcare, as clinical decisions must be understandable to all involved. Such concepts are fundamental for building trust, which is a cornerstone of medical practice: how far can healthcare go without human intervention? How much can we rely on black box systems, regardless of how well they perform? What about patient preferences, outliers, and old-fashioned medical intuition?

Despite all the promising advancements, there is still a risk of mistaking the tool for the solution. A vision of collaboration and co-creation between human and digital minds is key to going beyond fascination, or revulsion, and to truly fulfil the potential brought forward by AI.

# SCARDICCHIO ANTONIA CHIARA

UNIVERSITY OF BARI, ITALY

## BIOSKETCH

Prof. Antonia Chiara Scardicchio is Associate Professor of General and Social Pedagogy at the University of Bari "Aldo Moro". She earned a PhD in Health Sciences Pedagogy and completed post-doctoral work in educational design and evaluation. Since November 2023 she has a National Qualification as a Teacher of I Fascia. She specializes in health education, medical humanities, and narrative medicine, developing courses that integrate arts, biographical writing, and reflective practices into healthcare training. Her research focuses on pedagogy in health and care, systemic and complex thinking, and the use of narrative and symbolic methods in professional education. She is author of multiple books, recipient of national pedagogy awards, and serves on editorial and academic committees in health education and pedagogy.

## ABSTRACT

### The Challenge and Risks of AI in Medical Education

This study critically examines the seductive allure of "augmented brain" in the context of Artificial Intelligence (AI) integration into everyday life and, particularly, in medical education and clinical practice: we argue that the current trajectory of technological progress, especially concerning AI, may

paradoxically correlate with an involution of human intelligence and an erosion of essential human capacities, both intellectual and relational.

This perspective is substantiated by scientific evidence: the observed reversal of the Flynn effect, the prevalence of the Dunning-Kruger effect, the societal impact of the Post-truth age and "Brain-rot" phenomena, and the correlated global mental health pandemic marked by increased cognitive and emotional dysregulation. The increasing reliance on digital delegation risks fostering a "diminished brain," particularly for medical professionals who are confronted with the inherent uncertainty and complexity of patient care and life itself.

An AI is comfortable and tends to reassure rather than to challenge. The relationship with another human being, however—be it a patient or a colleague—is, by its nature, a locus of questioning. An authentic relationship is for this reason a demanding interior practice: it goes beyond the linear question-and-answer scheme, irreducibly requiring a space of research, of emptiness, of crossing uncertainty between the question and the answer.

Clinical reasoning isn't just about connecting data and evaluating probability: human thought is the ability to question, which goes beyond mere parameters of efficiency and effectiveness.

Clinical practice is, irreducibly, the capacity for care, not just as healthcare assistance, but as accompanying someone on a journey that is, for both patient and caregiver, an anthropological one.

This means that medical education cannot be reduced to "practical training." It involves the internalization of an inner habitus characterized by self-awareness, awareness of the other, and awareness of one's role as humans who, among and with other humans, seek and create meaning by research like internal forma mentis.

We posit that a re-evaluation of medical education, shifting the focus from a performance driven paradigm to one deeply rooted in anthropological, philosophical, and pedagogical understandings of knowledge and the human condition.

In this view, medical education is certainly specialized, yet is also undeniably anthropologically significant. To paraphrase: “if you want to know about medicine, you need to know more than just medicine.”

# SCHLÖGL-FLIERL KERSTIN

UNIVERSITY OF AUGSBURG, GERMANY

## BIOSKETCH

Prof. Kerstin Schlögl-Flierl is Professor of Moral Theology at the University of Augsburg, Germany, where she has served since 2015. She completed her doctorate and post-doctorate studies in Regensburg, also studying Catholic religious studies and German language and literature for teaching at grammar schools. She is a member of the German Ethics Council, advising on ethical issues such as emerging questions in artificial intelligence. Her research focuses on ethical challenges in healthcare and society, including interdisciplinary projects on self-determined living in nursing homes, in collaboration with the Centre for Interdisciplinary Health Research. She is the content director of the interdisciplinary Master's programme in Environmental Ethics.

## ABSTRACT

### What Is Needed for the Trustworthy Practice of AI in Medicine? An Empirical Look at Dermatological Practice

As artificial intelligence (AI) becomes increasingly integrated into clinical environments, questions of trust and transparency gain new relevance. This presentation will explore how public perspectives can and should influence

the ethical and technical development of AI tools in medicine, especially in doctor-patient conversation. The argument is grounded in empirical insights (embeddes ethics and social sciences approach in the Center for Responsible AI Technologies, Augsburg-Munich) from an interdisciplinary project focused on developing AI to support the diagnosis and treatment of skin cancer.

Ethical concerns are considered integral to the development process, rather than external to technical design. Accordingly, citizen feedback on trust is the main focus of interest in this presentation. Based on focus group discussions, three key areas of concern were identified: the new and evolving doctor-patient relationship, the ambivalent role of patient agency in AI- supported care, and the influence of specific medical contexts on public evaluations of AI (cf. the bias debates in dermatology). This presentation will illustrate how these citizen perspectives (the vulnerable groups in this new field) can be meaningfully connected with the medical and technical considerations shaping the development of AI. As a member of the German Ethics Council, I will analyze these observations with the recommendations of the German Ethics Council on the use of AI in medicine.

# VISSCHER MEL YU-CHENG

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## BIOSKETCH

Mel Yu-Cheng Visscher is a 26 y/o student at the Radboud Universiteit Nijmegen, finalising both a Master's degree in Medicine and a Bachelor's degree in Artificial Intelligence. He has been involved in various (inter)national innovation competitions (e.g., WCC, Philips, local entrepreneur of the year) with various (med)tech projects and start-ups. An alumnus of the Areté programme by ADF, and a co-founder of the only English-speaking Dutch Catholic youth organisation, he's been highly involved in the Catholic church in the Netherlands within various national organisations, parishes (OF, EF, Maronite) and courses (e.g., CST). After a senior clerkship in orthopedic surgery, elective clerkships in PM&R in France, and a research internship concerning a "brain-spine bridge" for spinal cord injury patients in Switzerland, he's now working in (neuro)rehabilitation centre in Enschede (the Netherlands), and writing his thesis on a hybrid form of transparent medical AI.

# WALDIS NIKLAUS

GENERAL PRACTITIONER, SWITZERLAND

**BIOSKETCH**

Dr. Niklaus Waldis is a Swiss general practitioner specializing in general internal medicine. In addition to his clinical work, Dr. Waldis is actively involved in international medical organizations; he serves as the treasurer and a member of the executive committee of the World Federation of Catholic Medical Associations (FIAMC), where he promotes Christian values in medicine globally. He was for several years president of the International Association of Physicians for Natural Family Planning. He is actively supporting Pro Life issues, especially in Switzerland where he is working as a Family Doctor.

# WICHROWSKI VICTOR

BRASILIA UNIVERSITY CENTER, BRAZIL

**BIOSKETCH**

Dr. Victor Costa Wichrowski is a physician specialized in Family and Community Medicine (FIOCRUZ) and a psychologist (University of Brasília). He serves as an assistant professor at the University Center of Brasília (UniCEUB), focusing on medical professionalism, teaching, and bioethics, and is a member of the university's Research Ethics Committee. His research and professional interests include patient care and mental health, social doctrine, and the integration of psychological and medical knowledge to promote ethical, humanized healthcare.