

Since the mid-1980s we have entered an ecological and social crisis that is now undeniable. We are torn between a very worrying present and the uncertainty of how what we do now will affect the future of the planet and humanity. Science itself may be changing now in the wake of artificial intelligence and big data. Long-termism is a philosophical view concerned with the task of developing an ethical thinking that takes into account the beings of the future.

IV Meeting CNIO- Banco Sabadell Foundation in Philosophy & Science

THE LONG-TERM VIEW

November 28, 2022 –CNIO Auditorium

09.50 Welcome Maria A. Blasco, Spanish National Cancer Research Centre, Spain
Arantza Etxeberria, University of the Basque Country, Spain

- **Session 1 - The Future of Planet Earth**

Chairperson: Arantza Etxeberria, University of the Basque Country, Spain

10.00-10.30 *Climate ethics and global justice for future generations*
Irene Gómez Franco, Autonomous University of Barcelona, Spain

10.30-11.00 *Global Biodiversity Decline in the Anthropocene*
David Nogués Bravo, Center for Macroecology, Evolution and Climate GLOBE
Institute, Faculty of Health and Medical Sciences, University of Copenhagen, Denmark

11.00-11.10 *Break*

- **Session 2 - The Future of Humanity**

Chairperson: Antonio Dieguez, University of Malaga, Spain

11.10-11.55 *The grand and vulnerable long-term future of humanity*
Anders Sandberg, Future of Humanity Institute, Universidad de Oxford, UK

11.55-12.05 *Break*

- **Session 3 - Our Future with AI**

Chairperson: Antonio Dieguez, University of Malaga, Spain

12.05-12.35 *Artificial Intelligence: a 360° perspective*
Idoia Salazar García, Journalist, Social Impact of Artificial Intelligence and
Robotics Observatory, CEU Spain

12.35-13.05 *What is (really) AI?*
Manuel González Bedia, Biomedical Engineering Information and
Communication Technology, University of Zaragoza, Spain

13.05-13.10 *Break*

13.10-13.50 *Debate*

13.50-14.00 *Farewell – Arantza Etxeberria, University of the Basque Country, Spain*

14.00 *Paella at the cafeteria*

Organisers:

Maria A. Blasco (CNIO) - **Antonio Dieguez** (UMA) - **Arantza Etxeberria** (UPV/EHU)

Dr. Maria A. Blasco

Scientific Director of the Spanish National Cancer Research Centre (CNIO)

Head of the Telomeres and Telomerase Group (CNIO)

Maria A. Blasco is a molecular biologist devoted to the study of telomeres and telomerase and their role in cancer and aging. Her work has been published in high impact journals as, Cell, Nature, Science or Cell Stem Cell, among others.

Blasco has merited vast recognition, both national and international. She was the recipient the EMBO Gold Medal in 2004. She has also been distinguished with the European Association of Cancer Research “Young Investigator Award” (2002), the Joseph Steiner Award (2003), the Rey Jaime I Prize for Basic Research (2007), the Körber European Science Award (2008), the Spanish National Research Award in Biology Santiago Ramón y Cajal (2010) as well as the Premio Jaume I, among others.

Blasco has received four Doctorate Honoris Causa in Spain: Universidad Carlos III of Madrid (2014), Universidad of Alicante (2017), Universidad of Murcia (2018) and Universidad Internacional de Valencia (2022). In October 2017 received the Generalitat Valenciana Scientific Award.

Blasco has been an editor and monitoring editor of different scientific journals, as Cancer Research and Journal of Cell Biology, as well as member of several national and international Scientific Committees. In 2020 also became a member of the Board of Trustees of Museo del Prado (Madrid, Spain)

Dr. Antonio Dieguez Dr. Antonio Diéguez is professor of Logic and Philosophy of Science at the University of Málaga, Spain. He is member of the Academia Malagueña de Ciencias. He has been a visiting scholar at the University of Helsinki, at Harvard University, and at the University of Oxford. He was the first elected president of the Sociedad Iberoamericana de Filosofía de la Biología (AIFIBI), from 2012 to 2017.

His first main research interest was the contemporary debate about scientific realism. On this issue, he published one influential book in Spanish -"Realismo científico" (1998). Afterwards, he extended his research interests to the fields of Philosophy of Technology and Philosophy of Biology, working especially on the technological determinism, the explanatory use of models, and the philosophical implications of the evolutionary explanation of mind. He published a book on this topic: "La evolución del conocimiento: De la mente animal a la mente humana" (2011). Recently, he has taken an especial interest in transhumanism, and has published two books, "Transhumanismo. La búsqueda tecnológica del mejoramiento humano" (2017), and "Cuerpos inadecuados" (2021). His position in this regard is critical, but recognizing the positive effects of biotechnology and even its possible use for human enhancement.

Dr. Arantza Etxeberria Agiriano is Associate Professor the Department of Philosophy (UPV/EHU). She graduated in Philosophy at the Complutense University of Madrid (1985), and obtained a PhD in Philosophy at the University of the Basque Country UPV/EHU (1992). She has taught undergraduate and graduate courses on Philosophy of science, Philosophy of Biology, and Philosophy, Science and Society. She is a researcher at [IAS Research Centre on Life, Mind and Society](#), recently she was the co-PI on a Project on *Inter-identities: Ontological and normative aspects of biological, cognitive and social individuality*, and co-edited a special issue of *Frontiers in Psychology* on the topic. Her main research interests and publications have been on individuality and autonomy in biology and medicine, biological organization and its evolution from the perspective of evo-devo, conceptualizations of biological reproduction, the evolution of pregnancy and menstrual health.

Organisers:

Maria A. Blasco (CNIO) - Antonio Dieguez (UMA) - Arantza Etxeberria (UPV/EHU)

Dr. Irene Gómez Franco is a philosopher and writer specialising in moral and political philosophy. She holds degrees in Philosophy and Economics, and a joint PhD from the Technical University of Berlin (TU-Berlin) and the National University of Distance Education (UNED, Madrid). She has carried out numerous research stays, most notably as a Marie Curie Fellow at the University of Chicago, as a research scientist at the University of Potsdam (Germany) and as a visiting professor at the National Autonomous University of Mexico. Her publications show a commitment to understanding philosophy as a critical exercise that compels practical transformation developing her lines of work along two main axes: theories of global justice (from a spatial and temporal point of view) and feminist theory. Irene is currently a lecturer at the Autonomous University of Barcelona (UAB) and the Open University of Catalunya (UOC), as well as a visiting researcher since 2010 at the Institute of Philosophy of the Spanish National Research Council (IFS-CSIC, Madrid). She is the author of *Deudas pendientes. La justicia entre generaciones* (Plaza y Valdés-CSIC, 2020).

Dr. Manuel González Bedia. Associate Professor at the University of Zaragoza on leave of absence. In 2019 he was a Member Advisor in the Cabinet of the Minister of Science, Innovation, and Universities, and, since March 2020, he has held the position of Deputy Director General of University Research Activity in the Ministry of Universities and Member of the Research Coordination Commission (Ministry of Science and Innovation and Ministry of Universities). He holds a Bachelor's Degree in Physics, a Master's in Social Studies of Science and Technology, and a Ph.D. in Computer Science (Extraordinary Prize) from the University of Salamanca. He worked as a consultant in Technology Management and Innovation at the Cotec Foundation and, since 2000, as a lecturer and researcher at the universities of Salamanca, Complutense, Carlos III de Madrid, Edinburgh, and Sussex (Brighton). Since joining the University of Zaragoza, he has coordinated the research group "Interactive Systems, Adaptation, Autonomy and Cognition" (ISAAC Lab) and has been Secretary of Transparency and Participation. His research has mainly focused on the development of computational models applied to the understanding and modeling of cognitive processes. He is a member of the European Society for the advancement of Artificial Cognitive Systems and co-founder of the Spanish Network of Cognitive Sciences. In 2019, he was the driving force behind the "Zaragoza Declaration", a manifesto drawn up by experts and members of civil society to call for a code of ethics for engineers in the field of smart technologies.

Dr. David Nogués Bravo. Full Professor at the Center for Macroecology, Evolution, and Climate, Faculty of Health and Medical Sciences, University of Copenhagen. His research mission is to provide research-grounded evidences for policies anticipating and mitigating the loss of biodiversity under global change. He also researches on the links between biodiversity and human health. Dr. Nogués Bravo has an h-index of 38, co-authored 67 publication(s), including 13 articles between Nature and Science, receiving 7362 citation(s). Previous affiliations of David Nogués-Bravo include CSIC and University of Oxford.

Abstract: Accelerating climate and land-use change are rapidly transforming Earth's biodiversity, endangering thousands of species and ecosystems. This biodiversity crisis threatens fundamental aspects sustaining our modern societies, and jeopardize its ability to sustain ecosystem services and support human well-being. Future decline of biodiversity decay may well trigger the erosion of the planet's natural capital, including negative impacts for global food security and human health. Here I will provide scientific evidence and present examples of the erosion of biological diversity, its implications for our own species and the potential solutions to halt nature's decline.

Organisers:

Maria A. Blasco (CNIO) - Antonio Dieguez (UMA) - Arantza Etxeberria (UPV/EHU)

Dr. Idoia Salazar García Founder and president of the Observatory on the Social and Ethical Impact of Artificial Intelligence (OdiseIA). Member of the team of experts of the Artificial Intelligence Observatory of the European Parliament. She is currently working on the configuration of the Artificial Intelligence Regulation Sandbox with the Spanish Government.

She is PhD professor at the CEU San Pablo University, specialising in Ethics and regulation in Artificial Intelligence. Author of 4 books on the social impact of AI and other new technologies. The latest: 'El algoritmo y yo: Guía de convivencia entre seres humanos y artificiales' and 'El Mito del Algoritmo: cuentos y cuentas de la Inteligencia Artificial'. She is an advisor for Spain on the Advisory Board of the International Group on Artificial Intelligence (IGOAI), a founding member of the Springer journal 'AI and Ethics' and a member of the Global AI Ethics Consortium (GAIEC).

Dr. Anders Sandberg is senior research fellow at the Future of Humanity Institute (FHI) at the University of Oxford. His research at the FHI centres on management of low-probability high-impact risks, societal and ethical issues surrounding human enhancement, estimating the capabilities of future technologies, and very long-range futures. He is a fellow for Ethics and Values at Reuben College, Oxford. He is research associate of the Oxford Uehiro Centre for Practical Ethics, the Oxford Centre for Neuroethics, the Center for the Study of Bioethics (Belgrade), and the Institute of Future Studies (Stockholm). He is on the board of the non-profits ALLFED and AI Objectives Institute.

Organisers:

Maria A. Blasco (CNIO) - **Antonio Dieguez** (UMA) - **Arantza Etxeberria** (UPV/EHU)