



II CNIO-Banco Sabadell Foundation Workshop on Philosophy, Science and Medicine.
Socio-environmental factors of health and disease
November 24, 2020 - Webinar

10.00 Welcome Arantza Etxeberria

- **Session 1- *Cancer from a philosophical and scientific view***

Chair: Maria A. Blasco,

10.10-10.35 *Explaining cancer: convergences toward a new conceptual framework*
Marta Bertolaso, University Campus Bio-Medico of Rome, Italy

10.35-11.00 *Difficult tumors – are patients living longer? And better? Are we curing them?*
Luis Paz-Ares, H12O-CNIO Lung Cancer Clinical Research Unit, Madrid, Spain

11.00-11.20 Debate (20 min)

11.20-11.30 Break

- **Session 2- *Socio-environmental factors of health and disease***

Chair: Antonio Diéguez

11.30-11.55 *Design Epistemology for public health research*
Anna Estany, Autonomous University of Barcelona, Spain

11.55-12.20 *Examples of research that integrates clinical, social and environmental causes of cancer*
Miquel Porta, Hospital del Mar Institute of Medical Research (IMIM), and Autonomous University of Barcelona, Spain

12.20-12.40 Debate (20 min)

12.40-12.50 Break

- **Session 3- *Evolution, environment and biodiversity***

Chair: Arantza Etxeberria

12.50-13.10 *Biodiversity Healing*
Elena Casetta, University of Turin - Italy

13.10-13.35 *Ecological bases of planetary health*
Fernando Valladares, National Museum of Natural Sciences, CSIC, Madrid, Spain

13.35-13.55 Debate (20 min)

Farewell Antonio Diéguez

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Dr Maria A. Blasco



Maria A. Blasco obtained her PhD in 1993 at the *Centro de Biología Molecular "Severo Ochoa"* under the supervision of M. Salas. That same year, Blasco joined the *Cold Spring Harbor Laboratory* in New York (USA) as a Postdoctoral Fellow under the leadership of C. W. Greider. As a postdoc she isolated one of the telomerase essential genes and generated the first telomerase deficient mouse model, which served to demonstrate the importance of telomerase in telomere maintenance, chromosomal instability and disease. In 1997, she returned to Spain to start her own research Group at the *Centro Nacional de Biotecnología* in Madrid. She joined the *Spanish National Cancer Research Center (CNIO)* in 2003 as Director of the Molecular Oncology Programme and Leader of the Telomeres and Telomerase Group. In 2005, she was also appointed Vice-Director of Basic Research at CNIO. Since June 2011, she is the CNIO Director.

For more than 20 years, Blasco's work has focused in demonstrating the importance of telomeres and telomerase in cancer, as well as in age-related diseases. Blasco has published more than 250 papers in international journals and has an h-index of 81. Her achievements have been recognized by the following international and national awards: Josef Steiner Cancer Research Award, Swiss Bridge Award for Research in Cancer, Körber European Science Award, the EMBO Gold Medal, the "Rey Jaime I" Award in Basic Research, the Fundación Lilly Preclinical Research Award, and the "Santiago Ramón y Cajal" National Award in Biology. Blasco holds two Doctorate Honoris Causa from the *Universidad Carlos III* of Madrid and from *Universidad de Alicante*.

Dr Marta Bertolaso



Marta Bertolaso is Professor of Philosophy of Science of Faculty of Science and Technology for Humans and the Environment and at the Institute of Philosophy of Scientific and Technological Practice, at University Campus Bio-Medico of Rome (UCBM), Italy. Her expertise in philosophy of life sciences, of scientific practice and in philosophy of complex organized systems with a strong scientific background has allowed her to promote and collaborate in interdisciplinary research and educational projects. She is currently focusing her work also on an integral understanding of the organismic development and cancer, of the notion of progress and of human work in the light of the new AI technologies. Since February 2018, she has been responsible for the scientific side of the "Human and Technology" section of the website Saluteuropa - <https://saluteuropa.org/category/uomo-e-tecnologia/> and she is Editor of the Springer Series "Human Perspectives in health Sciences and Technology" (<https://www.springer.com/series/16128>). Further information: <https://unicampus.academia.edu/BertolasoMarta>

Dr Elena Casetta



Elena Casetta is assistant professor at the Department of Philosophy and Education at the University of Turin (Italy), where she teaches Philosophy of Nature and Philosophy of Biology. Trained in theoretical philosophy, she then specialized in philosophy of biology at the IHPST (Institut d'Histoire et de Philosophie des Sciences et des Techniques), CNRS/Paris 1/ENS Paris and at the Centre for Philosophy of Sciences of the University of Lisbon, where she was the PI of the **BIODECON Project**. She works mainly on the species problem and the philosophy of biodiversity, with a focus on conservation sciences. On these topics, Elena wrote, with Andrea Borghini, the *Brill's Companion to the Philosophy of Biology*, 2019 and *Filosofia da biodiversidade*, Lisboa, Colibri, 2018. She also edited, with Julien Delord, *La biodiversité en question. Enjeux philosophiques et scientifiques*, Paris, Les Éditions Materilogiques, 2014; and with Carina Silva and Silvia di Marco, *Biodiversidade. O que é e porque é importante*, Lisboa, Gradiva 2018. Her latest book, edited together with Davide Vecchi and Jorge Marques da Silva, is *From Assessing to Conserving Biodiversity*, Springer 2019

Dr Antonio Diéguez



Antonio Diéguez is professor of Logic and Philosophy of Science at the University of Málaga, Spain. He was acting Dean and Vice-dean (1997-2002) of the Faculty of Philosophy and Humanities at the University of Málaga.

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 November of 2012 to September of 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)– and more than fifteen papers. He has also published several papers and two books as a co-author about Philosophy of Technology.

Afterwards, he extended his research interests to the field of Philosophy of Biology, working especially on the evolutionary explanation of the mind and its philosophical implications (evolutionary epistemology). He published a book on this topic: "La evolución del conocimiento: De la mente animal a la mente humana" (2011). More recently, he started a new line of research in Philosophy of Biology about the explanatory use of models in biology.

He is author of a handbook of philosophy of biology titled "La vida bajo escrutinio. Una introducción a la filosofía de la biología" (2012). He has also been coordinator of two collective books on Philosophy of Biology, one of them titled "Filosofía actual de la biología", published in 2013, and the other titled "Naturaleza animal y humana", published in 2014.

In the last few years he has been interested in the subject of transhumanism and posthumanism, and has published several articles on the subject, and a book entitled "Transhumanismo. La búsqueda tecnológica del mejoramiento humano" (Transhumanism. The technological search for human enhancement), (2017). His

position in this regard is critical, but recognizing the positive effects of biotechnology, and even its possible application to a moderate human enhancement.

Dr Anna Estany



Anna Estany, emeritus professor at the Philosophy Department of the Universitat Autònoma Barcelona. His research is devoted to the cognitive approach in epistemology and philosophy of science and to design sciences. Master of Arts in Indiana University, and PhD in Universitat of Barcelona. She has been in University of California San Diego as Visiting Scholar. Among her publications there are *Vida, muerte y resurrección de la conciencia. Análisis filosófico de las revoluciones científicas en la psicología contemporánea*, (1999), Barcelona: Paidós. *¿EUREKA? El trasfondo de un descubrimiento sobre el cáncer y la genética molecular*, (2003) with D. Casacuberta. Barcelona: Tusquets (Metatemas). *Innovación en el saber teórico y práctico*, with R.M. Herrera, 2016, College Publications. Editor with Angel Puyol *Filosofía de la epidemiología social*, Plaza y Valdés y CSIC, Madrid, 2016. Editor with Mario Gensollen *Democracia y conocimiento*, Ed. EXIMA, Universidad Autónoma de Barcelona y Universidad Autónoma de Aguascalientes, 2019. Editor with J. Vallverdú, A. Puyol Philosophical and methodological debates in public health. Springer, 2019. Now she is working on medical and epidemiological reasoning and on design epistemology.

Dr Arantza Etxeberria



Arantza Etxeberria Agiriano is Associate Professor at the University of the Basque Country UPV/EHU. AE graduated in Philosophy at the Complutense University of Madrid (1985), obtained a PhD in Philosophy at the University of the Basque Country UPV/EHU (1992) with a thesis on understanding cognition on its biological grounding and connectionist networks, and was a postdoctoral researcher at the University of Sussex (1992-1994). In recent years 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](#) at the University of the Basque Country since its beginning. 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. She has recently written articles on conceptualizations of biological reproduction and pregnancy, on relational accounts organisms and environments, and on the work on these topics of philosopher George Canguilhem. Her main research interests are on individuality and autonomy in biology and medicine, biological organization and its evolution from the perspective of evodevo, and classifications in science and society.

Dr Luis Paz-Ares



Luis Paz-Ares, University Hospital Doce de Octubre Complutense University Madrid, Spain. Luis Paz-Ares is currently Chairman of the Medical Oncology Department at the Hospital Doce de Octubre, Head of the Lung Cancer Unit at the CNIO (Spanish National Cancer Research Centre), Associate Professor at the Universidad Complutense, and President of Oncosur Foundation, all in Madrid, Spain.

He graduated with a degree in Medicine from the Universidad Autonoma de Madrid, in 1986, and completed a PhD in 1993 at the same university. He was a postdoctoral ESMO Research Fellow in Medical

Oncology at the Beatson Oncology Centre, University of Glasgow, Glasgow, Scotland (1993–1995), and completed a Master's degree in Clinical Pharmacology at the University of Glasgow in 1995. Luis Paz-Ares also completed a Master's degree in Clinical Unit Management at the UNED-Fundación Universidad Empresa (2002–2003).

Prior to his current position, he was Chair of the Medical Oncology Department at the Virgen del Rocío University Hospital in Seville (2007–2014), and Vice-Director of the Seville Biomedicine Research Institute (IBIS) Head of the Pharmacology Unit and responsible for early clinical studies of thoracic and genitourinary tumours at the University Hospital "12 de Octubre" in Madrid (1995–1999; 2000–2007), and Visiting Research Fellow in the Prostate Cancer Programme at the Dana-Farber Cancer Institute in Boston, MA, USA (1999–2000).

Luis Paz-Ares's research focuses on lung cancer and new therapeutic strategies development, both at the lab and clinical sides, and has published more than 240 papers in peer reviewed journals, as well as many book chapters, including New England Journal of Medicine, Lancet, Lancet Oncology, Journal of Clinical Oncology and many others. He is an active member of various scientific societies (including ASCO, ESMO, ELCC, IASLC and other) and collaborative groups (European Organisation for Research and Treatment of Cancer [EORTC], the Spanish Lung Cancer Group and the International Germ Cell Cancer Collaborative Group). At the beginning of 2017 he was awarded for his research work with the Lilly Foundation Award for Biomedical Research (Clinical) and with The Ramiro Carregal Oncology Award. Since the beginning of 2019 he is Vicepresident of the Spanish Association of Cancer Research (ASEICA)

Dr Miquel Porta



Miquel Porta, MD, MPH, PhD, Head, Clinical & Molecular Epidemiology of Cancer Unit, Hospital del Mar Institute of Medical Research (IMIM); Professor of Preventive Medicine & Public Health, School of Medicine, Universitat Autònoma de Barcelona (UAB); Adjunct Professor of Epidemiology, Gillings School of Global Public Health, University of North Carolina at Chapel Hill (UNC); Adjunct Professor, Grossman School of Medicine, New York University (NYU).

Miquel Porta is a physician, epidemiologist and scholar from Barcelona who works on molecular, clinical and environmental epidemiology of cancer, and has promoted the integration of biological, clinical, environmental and social knowledge and methods in research and teaching internationally.

The Unit of Dr. Porta at IMIM has a distinguished record of internationally recognized research on the clinical and molecular epidemiology of pancreatic cancer, with a focus on the role of gene-environment interactions, including persistent organic pollutants (POPs), other endocrine-disruptors (EDCs), and other environmental chemical agents. They have also published extensively on human biomonitoring and the uses of biomarkers to assess the impact of environmental factors on human health, as well as on diagnostic and therapeutic delays in cancer.

Prof. Porta has taught at several global institutions, including Imperial College (London), Harvard, McGill, the Universities of North Carolina, Ottawa, and Bergen, the City University of New York, Kuwait University, and several other universities in America and Europe. He has acted as an external grant and doctoral thesis reviewer for the Karolinska Institutet, the Finnish Academy, Diabetes UK, the Environment and Health Fund - Israel, the French National Cancer Institute, the National Science Centre in Poland, and several other European and American scientific organizations.

He was Chairman of the International Epidemiological Association (IEA) European Epidemiology Federation and member of the IEA World Council. He was President of the Spanish Society of Epidemiology (SEE). He is the current editor of *A dictionary of epidemiology* (New York, Oxford University Press, 2014).

Beyond his main lines of research, Dr. Porta has written and writes –both in the academic and in the lay presses and social media– on topics as causality, genomics, public health crises, scientific and social impacts of academic journals, or the societal roles of scientific associations. He believes that scholars have a responsibility to dialogue with and transfer knowledge to society; thus, he regularly collaborates with a variety of governmental and non-governmental organisations, public and private companies, and with selected media. He speaks, reads and writes fluently in Catalan, Spanish, French and English.

Twitter: @miquelporta – <https://twitter.com/miquelporta>

Linkedin: <https://www.linkedin.com/in/miquelporta/>

Facebook: <https://www.facebook.com/miquel.porta.9>

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<http://orcid.org/0000-0003-1684-7428>

http://www.researchgate.net/profile/Miquel_Porta

Dr Fernando Valladares



Fernando Valladares (www.valladares.info) has a PhD in Biological Sciences from the Complutense University of Madrid. He is a research professor at the CSIC, where he supervises the group on Ecology and Global Change at the National Museum of Natural Sciences. He is also an associate professor at the Rey Juan Carlos University of Madrid. He has published more than 300 scientific papers, articles and books on ecology and plant biology, being a highly cited scientist in the area of Ecology and Environment. He is currently vice president of the Iberian Society of Ecology. His research has focused on the impacts of global change on terrestrial ecosystems and on the mechanisms of tolerance and survival to extreme environmental conditions. He contributes to numerous media, maintains direct scientific dissemination on his channels "The health of Humanity" on YouTube, Twitter, Instagram and Facebook and writes regularly in various newspapers such as in the Critical Science section of eldiario.es.