



MARTA BERTOLASO

University Campus Bio-Medico (UCBM)
Department of *Science and Technology for Sustainable Development and One Health*
Head of the Research Unit of *Philosophy of Science and Human Development*
Via Alvaro del Portillo, 21 - 00128 Rome
m.bertolaso@unicampus.it

Marta Bertolaso is Full Professor of Philosophy of Science and Human Development at University Campus Bio-Medico of Rome. Her expertise in philosophy of science, scientific practice and ethics, with a strong scientific background, has allowed her to promote and collaborate in interdisciplinary research and educational programs on complex organized systems and human development. She is currently focusing her work on the integral development of adaptive systems and evolutionary processes for the digital, ecological and energetic transitions. The social impact and the emerging educational challenges for inclusion and sustainable innovation are the main focus of her contribution in institutional and international programs for a sustainable society too. For example, she currently collaborates with MASE (Ministry of the Environment and Energy Security within the Bioeconomy - CCNBBSV) and in the department for Work and Integral Wellbeing of the Vatican. Since 2017 Marta Bertolaso is Editor in Chief of Springer Series on “*Human Perspectives in Health Sciences and Technology*” (HPS&T) and of the Italian Rubettino Series on “*Fattore Umano & Complessità*”. She is corresponding member AISC (<https://www.aips.be/en>) International Academy of Philosophy of Science, and member of the Consulta Italiana di Filosofia. More information about her work and publications is available below.

Academic CV & PUBLICATIONS

Nationality: Italian

Current Positions:

Since 1st of February 2022: Full Professor of Philosophy of Science – *Department of Science & Technology for Sustainable Development and One Health. Head of the Research Unit of Philosophy of Science and Human Development*

Other relevant current positions:

- Since 2023: **corresponding member** of <https://www.aips.be/en> International Academy of Philosophy of Science - [ACADÉMIE INTERNATIONALE DE PHILOSOPHIE DES SCIENCES](https://www.aips.be/en)
- Since 2024: Scientific Committee UCBM Academy
- Since 2023: member of the Observatory on **Open Innovation** – Politecnico di Milano
- Since 2023: member of the Scientific Committee of the **European School of Oncology Advisory Board.**
- Since 2022: **Member of Consulta Italiana di Filosofia**
- Since 2022: member of **G.C. General Consulting Network**
- Since 2022: member of the **working group “Lavoro e benessere integrato”** at Dipartimento per il benessere integrale “Maria e il creato” della Pontificia Accademia Mariana Internationalis
- Since 2021: **Member of the national coordination group ‘Bioeconomia’ for the Ministero della Transizione Ecologica:** <https://cnbbsv.palazzochigi.it/it/materie-di-competenza/bioeconomia/>
- Since 2021: Founder and Board member of **Venture Thinking:** www.ventirethinking.it
- Since 2021: **Member of the European Group Governance in Complexity:** <http://ecgc.eu/>
- Since 2020: **Delegate of the Rector** of University Campus Bio-Medico of Rome for R.U.S. (Rete Italiana delle Università per la Sostenibilità): <https://sites.google.com/unive.it/rus/chiamo>
- Since 2020: **Delegate of the Rector** of University Campus Bio-Medico of Rome for RUNIPACE (Rete Italiana delle Università per la Pace): www.runipace.org
- Since 2019: Member of the **External Faculty of Konrad Lorenz Institute (KLI)** -An independent Center for Advanced Studies in Life and Sustainability Sciences, Klosterneuburg, Vienna, Austria https://www.kli.ac.at/content/people/all_people/view/254
- Since 2018 – **Scientific director** of the Human and technology section of the website Saluteuropa - <https://saluteuropa.org/category/uomo-e-tecnologia/>
- Since 2018: **Scientific Committee** of Fondazione Alberto Sordi: <http://www.fondazionealbertosordi.it/>
- Since 2017: **Editor in Chief** of Springer Series on “Human Perspectives in Health Sciences and Technology” (HPS&T) starting in 2018. <https://www.springer.com/series/16128>
- Since 2006: **Bord Director** of *Home Renaissance Foundation* (London), **Scientific Committee Member** for the area of “Health and Primary Care”: <http://www.homerenaissancefoundation.org/homeorg/directors.html>

Previous Relevant Academic/Scientific Positions:

2020 – 2023: adjunct professor in CC BIO (University of Bergen): <https://www.uib.no/en/ccbio>

2021-2023: Member of the CTS (Comitato Tecnico Sanitario) of the Ministero della Sanità, Biotecnologie innovative (voluntary resignation).

30th July 2018: Italian *Abilitazione Nazionale* for Full Professor in Philosophy of Science (SC: 11/C2 – SSD: M-Fil02).

2nd July 2017-1st February 2022: Associate Professor of Philosophy of Science, Faculty of Science and Technology for the Humans and their environment, University Campus Bio-Medico of Rome, Italy. **2012-2017:** Assistant Professor of Philosophy of Science, Faculty of Engineering and Institute of Philosophy of the Scientific and Technological Practice (IPSTP), University Campus Bio-Medico of Rome, Italy.

2008-2010: PhD in Bioethics at the Institute of Philosophy of the Scientific and Technological Practice (University Campus Bio-Medico of Rome) with a thesis on the ‘Evolution of the epistemological models of cancer’ (rated Excellent). Awarding on the 13th of April 2011.

1997: National Professional Qualification for Biologists, at the University of Pavia

1995: Degree in Biological Science, Graduation thesis presented at the National Institute for Tumours of Milan (Maximum Score and Honours).

Main Awards:

2019: Expanded Reason Award 3rd Edition – Research Category, by University Francisco de Vitoria (Madrid, Spain) for “Philosophy of Cancer – A Dynamic and Relational View” (2016) Springer Series in “History, Philosophy and Theory of the Life Sciences”, 18.

1991: Philips National competition for “Young Researchers” with a study on “Experimental verification of the initial events in germination”.

Main Fellowships (in Philosophy of Science)

- 24th – 31st March 2019: *Visiting Scholar* at the Department of History and Philosophy of Science, Pittsburgh, PA, USA. Ref. Sandra Mitchell.
- 26th August - 3rd September 2018: *Visiting* at Konrad Lorenz Institute (KLI) for Evolution and Cognition Research, Klosterneuburg, Vienna, Austria.
- 6th – 9th May 2015: *Visiting* at Egenis (Centre Of Studies of Life Sciences), University of Exeter (UK). Ref. John Dupré.
- April 2013 - May 2014: *Visiting Fellow* at the Centre of Biomedical Humanities of the Department of Experimental Oncology of IEO, University of Milan. Ref. Giovanni Boniolo
- September – December 2012: *Visiting Fellow* – Center for Philosophy of Science, Pittsburgh University, http://www.pitt.edu/~pittcntr/People/visiting_fellows/vf_2012-13/bertolaso.html
- 28th February – 9th May 2011: *Visiting Scholar* at the Department of History and Philosophy of Science, Pittsburgh, PA, USA. Ref. Sandra D. Mitchell.
- 10th – 21st January 2011: *Visiting Scholar* stay at the IHPST (Institut d’Histoire et de Philosophie des Science et des Techniques), Paris, France. Ref. Jean Gayon.

Scientific Experience:

- **1994-1996:** INT (National Tumor Institute), Milan in the department of molecular biology with a project on the gene expression and localization of c-ERB2 in the ovarian cancer
- **1997** (2nd June ‘97 – 1st June ‘98): obtained a Regional Grant (funded by ASL1 of Turin) for a project on “Genetic molecular alterations and malignancy in primary breast cancers”, at the department of anatomical pathology, San Giovanni Vecchio Hospital, Turin (Italy)
- **1998-1999** (1st January ‘98 – 31st May ‘99): IRCC (International Research Centre for Cancer), Candiolo, Turin, Regional Grant (funded by G. Ghirotti Foundation) for a project on

“Development of a non-radioactive protein truncation test: applications in the clinical area for the analysis of mutated genes involved in familiar syndromes and sporadic cancers”

- **2008-2010**: Grant from UCBM for a research project at the Institute of Philosophy of the Scientific and Technological Practice at University Campus Bio-Medico of Rome on Philosophy of Cancer and Cancer Research’.
- **Since 2008**, after having experienced in first hand some bio-medical research (see above), I have been developing my philosophical training, skills and academic CV in **research, teaching and tutoring**, and **research group promotion and coordination** at academic level, in contact with the national and international scientific and academic environments (both Anglo-Saxon and Latin, Spanish speaking communities).

Previous (1995-2008) Educational and Training programs

Organized and promoted for:

- **RUI Foundation** (Residenze Universitarie Italiane)
- **ICU** (Institute for University Cooperation)
- **AEC** (Association for Education and Culture, Turin)

PROJECTS

NATIONAL PNRR projects I am involved in:

- **Rome Technopole**: Flagship8, as coordinator for UCBM (Coordinamento nazionale di Ivan Danesi, UNICREDIT).
- **Biodiversity Centre**: Spoke 6 per UCBM, ma contributo specifico con SPOKE n. 8 (innovazione e sue dinamiche) coordinato da Università di Pisa (Alberto Di Menin). Coordinamento centrale: CNR.

<i>Project Title</i>	<i>Funding source</i>	<i>Amount (Euros)</i>	<i>Period</i>	<i>Role (it refers to the effective activity; formal terms might change depending on the calls/grants)</i>
PERSONAL FUNDING				
PRIN	Integral WELLbeing for human flourishing: healthcare and food from an ethical and legal perspective (I-WELL)	242.214 €	2023-2025	Researcher
HEALTHCARE 5.0	Social Trend Institute	30.000 €	2023-24	PI
Borsa Dottorato - HUBQUARTER	Regione Lazio + e-FM	76.000 €	2023-2025	PI
Different Intelligence	World Templeton Foundation	100.000 \$	2021-22	Co-PI
Geografia dell'appartenenza (geography of the membership)	IC2Lab: https://www.resonnetw.ork.it/it/departement/ic2-lab.html	5.000 €	2021	Co-PI

Society X.0 in the rise of a new epoch. The human factor in the social, economic and relational ecosystems	STI	30.000 €	2021	PI
Connecting the dots: scienza, conoscenza e società	FCA	10.000 €	2020	PI
Costruire ponti: generazioni, tecnologia e casa	Fondazione Alberto Sordi	10.000 €	2019-2020	PI
Personalized Medicine and New Trends in the Bio-Medical Sciences and Technologies. Combining Scientific and Humanistic Approaches to Complexity	Social Trends Institute	30.000 €	2019-2020	PI
Intelligenza Artificiale e Società: tra innovazione e bene comune	FCA	10.000 €	2019	PI
Organ-on-Chip Conference	Università Bicocca di Milano	5.700 €	04/10/2018-31/12/2019	One of the two main coordinator (other: Lilia Alberghina, Università Bicocca, Milano)
Metaphysics of Biology: Framing the Interactions between Metaphysics and Molecular, Developmental and Evolutionary Biology	Ministerio de Economía y Competitividad Coordinated by Maria Cerezo (Full professor of Philosophy of Science, Universidad de Murcia, Facultad de Filosofía, Departamento de Filosofía) ID: FFI2017-87193-P	27.830 €	01/01/2018-31/12/2020	External researcher
Ospedale_4.0: verso un nuovo <i>modello di care</i> che integri le necessità territoriali con le tecnologie emergenti a servizio delle persone	FCA	10.000 €	03/18-12/18	PI

Bio sciences & Technology	Social Trends Institute	15.000 + 10.000 €	2017-2019	PI
Bio-Sciences & Technology: an integrated research program	Fondazione Gaetano e Mafalda Luce	20.000 €	2017-2018	PI
Will Science Remain Human? Frontiers of the Incorporation of Technological Innovations in the Biomedical Sciences	Social Trends Institute	30.000 €	2017-2018	PI
Contemporary Issues in Metaphysics of Biological Sciences	Fundación Séneca (Agencia de Ciencia y Tecnología de la Región de Murcia) Coordinated by Maria Cerezo (Full professor of Philosophy of Science, Universidad de Murcia, Facultad de Filosofía, Departamento de Filosofía) ID: 19489/PI/14	11.280 €	2015 (1st of July) - 2018 (30th of June)	External researcher
MeTA-Es	Promoted by the departments of “Scienze della formazione e psicologia”, of “Scienze della salute” and of “Neurofarba” University of Florence		Since July 2014	Researcher for Philosophy of Bio-Medicine
Bio-medical humanities: un crocevia al servizio di idee umanizzanti	FCA	10.000 €	2017	PI
Evolving Embodied Habitats: Abitare l’Ambiente	FAS	60.000 €	2016-2017	PI
Self-on-a-Chip: A Study of Embodiment in Innovative 3D Cell-Culture Models	UCBM	20.000 + 10.170 €	2016-2019	PI
The unity of the human being: from embryonic development to the generation of habits	John Templeton Foundation and Oxford University Coordinated by Hector Velazquez (Universidad Popular	15.000 US\$	2016-2017	External Researcher

	Autónoma del Estado de Puebla, Mexico). http://www.cyril.org/en/project-grants/projects/			
“In Silico Medicine” ed etica: programma di formazione e ricerca	FCA	10.000 €	2016	PI
Assistenza in ambiente domestico mediante le nuove tecnologie	FCA	10.000 €	2015	PI
Contemporary Issues in Metaphysics of Biological Sciences	Ministerio de Ciencia e Innovación Coordinated by Maria Cerezo (Full professor of Philosophy of Science, Universidad de Murcia, Facultad de Filosofia, Departamento de Filosofia) ID: FFI2013-47849-P	29.040 €	2014-2017	External researcher
Bio* project	FCA and Pittsburgh University	15.000 € + 11.000 \$	2014-2016	PI
Models And Inferences In Science. Logical, Epistemological, and Cognitive Aspects	PRIN, Founded by the Italian Government ID: 20122T3PTZ		2013-2017	External researcher
Determinism and indeterminism: from science to philosophy in Spanish speaking academia	John Templeton Foundation ID: 38920 http://www.austral.edu.ar/filosofia-deteind/en/nuestro-proyecto/		2013–2015	External researcher
Change: Semantics and Metaphysics	Ministry of Science and Innovation of the Spanish government Coordinated by Maria Cerezo (Full professor of Philosophy of Science, Universidad de Murcia, Facultad de Filosofia, Departamento de Filosofia) ID: FFI2009-13687-C02-01	31.460 €	2010-2013	External researcher

GRANTS FOR EDUCATIONAL PROJECTS				
Winter School for undergraduate students, “Epistemology of the Scientific Discovery”	Funded by FRUI (Fondazione Residenze Universitarie Italiane) and University Campus Bio-Medico of Rome	1.000 €	February and March 2012	PI
Summer School for undergraduate students, “Human enhancement and the pursuit of happiness. Prospects and implications” in Boston, in collaboration with professors from MIT and TUFTS University	Funded by FRUI (Fondazione Residenze Universitarie Italiane)	5.000 €	August 2010	PI
Pilot Educational Project, “The concept of ‘the quality of life’ in the elderly: an international pilot study and its epistemological implications”	HRF and UCBM	10.000 €+ 10.000 \$	2008-2010	One of the two main coordinator (other: Marta Elvira: Lexington College, Chicago, IESE Madrid)

Collaborations with other research groups in Italy and Europe:

- 2020- 2022: Consultant for [GLGCouncils_HC@glgroup.com](mailto:HC@glgroup.com) on ‘In silico medicine’.
- 2019-2021: collaboration in CEO coaching meeting with ELIS (www.elis.org)
- Since April 2020: board and scientific board in Venture Thinking initiatives: www.venturethinking.it
- Since January 2019: enrolled in the Agorà Europe database - <https://www.movimentoeuropeo.it/agora/index.php?lang=en>
- Since January 2019: member of “Women&Technologies” Association - <https://www.womentech.eu/womentech-associazione-donne-e-tecnologie>
- Since October 2018: member of a group of research for the Research chair "The Social issues of precision medicine in oncology" organized by the French national cancer institute (INCa), in partnership with the École Normale Supérieure de Lyon (laboratory Triangle) and the LYriCan integrated cancer research site (Léon Bérard Center and Hospices Civils de Lyon)
- Since April 2018: member of the Scientific Committee of Sites de Recherche Intégrée sur le Cancer (SIRIC) at Pitié Salpêtrière, Paris.
- Since October 2017: member of Systems Biology Group Lab at La Sapienza University of Rome (www.sbglab.org)

- 11th January 2018: VPH Consortium Meeting in Amsterdam
- 26th-27th June 2018 Flagship and DigiTwins – AICAN intervention on SSH issues
- Since January 2017: member of “Embryo, Human Development & Society – (EHDAS – www.edhas.org)
- 2012-2016: member of a group of research on Systemic Philosophy at the Catholic University of Milan.
- March and June 2015: Avicenna Meetings (roadmap for Horizon 2020 on ‘In Silico Clinical Trials’) Expert involved in the Avicenna consensus process (cfr. Annex 1) – <http://avicenna-isct.org/>
- Since 2013: Grupo de Estudio de la Conferència Càtedra "Cultura, ciència y religión" directed by Josep Corcó Juviniá, UIC, Barcelona (Spain).
- 2012-2013: member of a group organizing seminars of epistemology at the University of the Holy Cross, Rome: “L’accesso alla dimensione spirituale della persona nel contesto della filosofia e della scienza contemporanea” – seminar.

Languages

<i>Language</i>	<i>Writing</i>	<i>Listening</i>	<i>Speaking</i>	<i>Reading</i>
	Madre	Madre lingua		
ITALIAN	Mother tongue	Mother tongue	Mother tongue	Mother tongue
ENGLISH	Good	Excellent	Very good	Excellent
SPANISH	Excellent	Excellent	Excellent	Excellent
FRENCH	-	Fine	-	Good

CURRENT TEACHING in University Campus Bio-Medico of Rome

- Since 2020-2021: teaching Management and Digital Mindset Lab (UCBM, ING-ISS)
- Since 2020-2021: teaching The Human Factor in the Digital Transitions (UCBM, ING-ISS)
- Since 2020-2021: teaching English Language and Soft Skills for Engineering Sciences (UCBM, ING-I)
- Since 2019-2020: teaching Human Ecology and Sustainability (UCBM, STAGEF)
- Since 2018-2019: teaching Filosofia dell’uomo e della riabilitazione (UCBM, Cdl Fisioterapia)
- Since 2012: teaching Philosophy in the Engineering Sciences (UCBM, ING-I)
- Since 2015: teaching Sustainability (UCBM, ING-C)
- Since 2014: teaching in Ethics of Human Nutrition (UCBM, SANUM)

Since 2017: coordinator of the interdisciplinary course within the PhD program Scienze e Ingegneria per l’uomo e per l’ambiente/Science and engineering for humans and the environment - DOT13A0534.

Recent 2020-2021 Masters Teaching

- 2020-2022: LUISS Guido Carli Business School: Master Executive “Sperimentazione Clinica”: Major del Master in Management della Filiera della Salute. 3 July 2020: Sperimentazione clinica - Aspetti etici e privacy nella gestione dei campioni biologici.
- 2021-2023: Corso di perfezionamento in Bioetica, Università di Padova
- 2021, 27th July - "Globalization Governance and International Understanding": Globalization and Health, Link Campus University

Other Previous International TEACHING Experiences

- Department of Philosophy, Washington University of St. Louis, USA – November 6th to November 14th 2016: 4 hours lectures on theoretical and ethical issues related to Transhumanism, Post-Genomic Era and In Silico Medicine, in Anya Plutynski's course on "Biomedical Ethics" (undergraduate students).
- Munich Center for Mathematical Philosophy (MCMP), Ludwig-Maximilians-Universität München – June 28th to July 8th 2016: weekly lectures on "Complexity and Causality in Medicine" in the course for PhD students and post-doc in philosophy and bio-sciences, on Philosophy of Causality held by Barbara Osimani and Roland Pollinger.
- Universidad Popular Autónoma del Estado de Puebla (UPAEP), Mexico – February 7th and 8th 2017: 9 hours of lectures for scientists, doctors, humanists and philosophers on "Philosophy of Cancer".

Mentor/Tutor for THESIS or POST-DOC students

- 2014-2015: Undergraduate thesis in Philosophy (University of Bologna): Filippo Landi – co-supervisor
- 2014-2018: PhD thesis in Philosophy of Science (University of Roma Tor Vergata and IHPST-Paris): Anna Maria Dieli – tutorial lecturer from 2014 to 2017, final examiner in 2018
- 2016-2017: post-doc grant, Mattia Della Rocca (University Campus Bio-Medico of Rome) – member of examining board during PhD thesis dissertation – substitute
- 2017: post-doc grant, Mattia Della Rocca (University Campus Bio-Medico of Rome) – member of examining board
- 2016-2017: post-doc grant, Federico Boem (University Campus Bio-Medico of Rome)
- 2017-2018: post-doc grant, Fabio Sterpetti (University Campus Bio-Medico of Rome)
- 2018-2019: post-doc grant in Philosophy of Science (University Campus Bio-Medico of Rome): Chiara Beneduce – supervisor
- 2023- 2025: Maria Laura Ilardo – Philosophy of Bio-Medicine - Epistemology of risk
- 2024-2025: Angelo Marinucci – Philosophy of Life and Complexity

Bertolaso's PhD students:

- **2018-2022:** Laura Corti Phd student on "Lo schema corporeo nei soggetti con neuroprotesi: un'analisi fenomenologica" – main supervisor
- **2018-2022:** Andrea Pensotti, industrial PhD student on "Studio sul processo di modellizzazione in silico di dinamiche biologiche multilivello in oncologia" (University Campus Bio-Medico of Rome) – main supervisor
- **2019-2023:** Sabrina Melino PhD student on "Per una cura integrata della malattia cronica. Dal cuore della cultura europea, la riscoperta del dialogo tra discipline scientifiche e umanistiche" – main supervisor
- **2020-2024:** Emiliano Boschetto, industrial PhD student on "La transizione digitale: nuove prospettive per il concetto di benessere organizzativo nei sistemi complessi" – main supervisor
- **2020-2024:** Luca Capone, PhD on "Tecnica e rappresentazione nell'era digitale: Prospettive teoretiche e pratiche per una filosofia dei big data" – main supervisor
- **2023-2026:** Roberta Nobile – AI national PhD - co-supervisor
- **2024-2027:** Paola Iadaresta – Human Flourishing at UCBM– co-supervisor

Fellows from other universities (funded from external/their university)

- June-August 2021: Pablo Garcia: Univ. di Malaga: Epistemology and philosophy of aging and its current scientific agendas
- July 2021: José Mara Pelaez: Univ Francisco de Victoria (Madrid): CSR and relational and sustainable management.

PhD dissertations' commissions:

- 2021: PhD thesis in Philosophy of Science, Sarah , Sorbone, Paris. Mentors:
- 2021: PhD thesis in Philosophy of Life Sciences, Guglielmo Militello (Universidad Pais Basco, Spain). Mentors: Alvar Moreno, Leonardo Bich.
- 2018: PhD thesis in Philosophy of Science: Alessandra Passariello (Sapienza University of Rome)
- 2020: PhD thesis in Medicine: Caroline Benedicte Nitter Engen (University of Bergen) – final examiner (2° opponent)
- 2018: PhD thesis in Philosophy of Science: Elsa Muro (Universidad Navarra) – final examiner

Member of other SCIENTIFIC COMMITTEES:

- 2024: member of the committee for the PhD Programm in Theory of contracts, services and markets, University of Rome Tor Vergata, Department of Management and Law
- 2021: 4th Philosophy of Cancer Biology workshop in Bordeaux (<https://www.philinbiomed.org/event/fourth-philosophy-of-cancer-biology-workshop/>)
- 2019 Member of the Program Committee of Prague Philosophy of Medicine Conference (4-5 June 2020)
- 2019 Scientific Referent for Associazione Amici del Campus Bio-Medico di Roma Onlus
- 2019 Scientific Referent for Generali-ELIS project under the chairmanship of Marco Sesana for universities
- 2018 Member of Scientific Committee of CUIR (Collegio Universitario Internazionale di Roma)
- 2015 Member of Collegio docenti - Dottorato di Ricerca in Scienze e Ingegneria per l'uomo e l'Ambiente

EDITORIAL Boards/Scientific Committees

- June 2022: **Scientific Commette Member** of 'Bioetica & Biogiuridica' Morcelliana Series, Laura Palazzani Director.
- July 2022: **Scientific Commette Member** of 'COMPLECTi', Journal, Andrea Pensotti, Gedi Group.
- November 2021: Acta Philosophica
- April 2021: Scientific Committee of Mefisto Journal
- 12th of July 2017: *Organisms – An International Journal of Biological Sciences* (Scientific Board) ISSN: 2532-5876
- 2014-2019: Journal *Scienze e Ricerche* (Editorial Board or Scientific Commitee) – ISSN: 2283-5873, http://www.scienze-ricerche.it/?page_id=35
- 2016: *Filosofia e saperi. Sconfinamenti tra saperi umanistici e scienze della vita/ Crossing borders between humanities and life sciences* (Scientific Committee member) <http://www.ispf.cnr.it/Pubblicazioni/filosofiaesaperi>
- 2016: *Medicina e Storia* (Executive Board), <http://www.sibiom.org/medicina-storia>

- June 2015: *Bioethics Update* - Editor in Chief: Evandro Agazzi (Editorial Advisor)- ISSN 2395-938X <https://www.journals.elsevier.com/bioethics-update/editorial-board>
- November 2013: Journal *Current Bioinformatics* (Book Review Editor) ISSN: 2212-392X (Online) ISSN: 1574-8936 (Print) <https://benthamscience.com/journals/current-bioinformatics/editorial-board/>
- September 2013-2017: *Per La Filosofia*, International Peer-Reviewed Journal (Comitato di redazione) ISSN 0394-4131 / ISSN elettronico 1724-059X
- 2012-2021: *Medic - Metodologia didattica e innovazione clinica* (Editorial Board) ISSN 1824-3991 <http://www.medicjournalcampus.it/comitato-scientifico/>

Current Main Research Areas

A. Philosophy of Sustainability, Sustainable Organizations and Care

I am developing a *Sustainable Society Project and Observatory*. In dialogue with contemporary developments in engineering, economy and social sciences I have been expanding my reflections on living dynamics to the organizational sciences, to the concept of Wellbeing and Healthcare for the Social Sciences. I am interested both in evolutionary processes, new models and metrics for sustainable innovation, in the new frontiers of leadership, organizational models and their adaptive processes, sustainable management. I am contributing to a systemic understanding of the ecological, digital and energetic transitions, and of their impact on organizations, for enterprises and welfare programs and for the policies more in general.

B. Scientific Practice: Contemporary Epistemological Issues, Virtues and Ethics

The main topics I have been focusing on have been Artificial Intelligence and human work (Big Data), management and transmission, human enhancement with their ethical and social implications. More recently, I have been asked also to reflect on the implications for technology, sociology, economics and education of some emerging concepts in philosophy of science and philosophy of life sciences such as complexity, intelligence, critical thinking, sustainability, integral development.

C. Philosophy of Scientific Practice and Philosophy of Life Sciences

I have been focusing on the Epistemology of Science and Philosophy of Life Sciences since ever. In particular, both my previous scientific work and endeavours in the Philosophy of Science have dealt with different aspects of regulatory and control issues of complex biological systems, organizations, and growth. I have also studied how different explanatory theories evolve in science, and how (mechanical) models can be considered a way towards discovery in the bio-technological field. How science works in practice, from genetics to bio-engineer, has also been one of the most recent areas of research and philosophical reflection. A particular attention has been paid to Systems Biology as it has been strictly connected with contemporary research on the organismic dynamics.

Papers – ARTICOLO IN RIVISTA

1. Venesio T, Balsamo A, Scordamaglia A, Bertolaso M, Arrigoni A, Sprujevnik T, Rossini FP, Risio M (2003). Germline APC mutation on the beta-catenin binding site is associated with a decreased apoptotic level in colorectal adenomas. *Mod. Pathol*, 16(1): 57-65. ISSN 0893-3952
2. Bertolaso M, Gaudino C, (2007) *Leben aus dem Labor? Die Aktualität von “Donum Vitae”*, *Imago Hominis*, Band 14 - Heft 2, 110-112. ISSN: 1021-9803
3. Piredda M, Bertolaso M, Tartaglini D, De Benedictis A, De Marinis MG (2008). Valenza etica del nursing (The Ethical Valence of Nursing). *Ital J Rehab Med - MR*, 22: 229-33. ISSN: 1128-4935
4. *Bertolaso M (2009) Towards an Integrated View of the Neoplastic Phenomena in Cancer Research, *Hist. Phil. Life Sci.*, 31:79-98. ISSN: 0391-9714
5. -Bertolaso M (2009) The neoplastic process and the problems with the attribution of function, *Rivista di Biologia/Biology Forum*, 102:273-295. ISSN: 0035-6050
6. -Bertolaso M, Olsson J, Picardi A, Rakela J (2010). Gene Therapy and enhancement for diabetes (and other diseases): the multiplicity of considerations. *Diabetes Metab Res Rev*, 26:520-524. ISSN: 1520-7552, doi: 10.1002/dmrr.1116
7. Bertolaso M, Giuliani A, Degara L (2010) Systems Biology reveals biology of systems, *Complexity*, 16: 1-7. ISSN: 1076-2787, doi: 10.1002/cplx.20353
8. -Bertolaso M (2011), The two sides of the hourglass: analytic and synthetic approaches in cancer research, *Ludus Vitalis. Journal of Philosophy of Life Sciences*, 19 (35): 73-95. ISSN 1133-5165
9. -Pennacchini M, Bertolaso M, Elvira MM, De Marinis MG (2011), A brief history of the Quality of Life: its use in medicine and in philosophy. *Clin Ter*, 162 (3), e99-103. ISSN: 0009-9074
10. *Bertolaso M (2011), “Hierarchies and Causal Relationships in the Interpretative Models of the neoplastic process”, in Special Issue “Causation and Disease in the Post-Genomic Era”, *Hist. Phil. Life Sci.*, vol. 33(4): 515-536 ISSN: 0391-9714
11. -Bertolaso M (2011), “Epistemology in Life Sciences. An Integrative Approach to a Complex System like Cancer“, in a Forum on “Possibilities for multidiscipline”, *Ludus Vitalis. Journal of Philosophy of Life Sciences*, 19(36): 245-249 ISSN: 1133-5165
12. - Ugolini S, Bertolaso M, (2011), *Scienza e Società: la Medicina della Saga di Twilight (Science and Society: Medicine in the Twilight Saga)*, *Medic. Metodologia Didattica ed Innovazione Clinica*, 19(2): 42-48. ISSN: 1824-3991
13. Cherubini C, Gizzi A, Bertolaso M, Tambone V, Filippi S (2012), “A Bistable Field Model of Cancer Dynamics”, *CiCP (Commun. Comput. Phys.)*, Vol. 11, No. 1, pp. 1-18. ISSN: 1815-2406, 10.4208/cicp.270710.220211a
14. *Bertolaso M. (2012) *La Dimensione non Riduzionista del Riduzionismo nella Ricerca*

Sperimentale Dai Modelli Molecolari a Quelli Sistemici nella Ricerca sul Cancro. Rivista di Filosofia Neo-Scolastica, Vol. 4. p. 687-705 ISSN: 0035-6247

15. -Barcaccia, B., Esposito, G., Matarese, M., Bertolaso, M., Elvira, M., De Marinis M.G. (2013) Defining quality of life: a wild-goose chase?, Europe's Journal of Psychology, special issue Quality of Life in Social Science & Clinical Medicine, February 2013, Vol. 9(1), 185–203, doi:10.5964/ejop.v9i1.484 ISSN: 1841-0413

16. *Bertolaso M (2013). On the Structure of Biological Explanations: Beyond Functional Ascriptions in Cancer Research. Epistemologia, vol. 36, p. 112-130. ISSN 0392-9760

17. -Bertolaso M. (2013) La Indeterminación Biológica y las Perspectivas Sistémicas de la Biología Contemporánea - Biological Uncertainty and the Systemic Perspectives of Contemporary Biology . Anuario Filosófico, vol. 46/2, p. 365-386. ISSN 0066-5215

18. -Bertolaso M (2013) Breaking Down Levels of Biological Organization, Theoretical Biology Forum (Rivista di Biologia), Vol 106(1-2), 49-71 ISSN 0035-6050, ISSN ELETTRONICO 1825-6538

19. *Bertolaso M (2014) Why It Proves so Difficult to Pin Down a Definition of Nature. In a Special Issue on “Rethinking Nature”, *Teoria* (call for a special issue), 34(1): 75-92. ISSN 1122-1259

20. *Bertolaso M, Ghilardi G (2014) Semantic roots of reductionism limits, Rivista di Filosofia Neo-scolastica, 3: 481-500. ISSN: 0035-6247

21. Giuliani A, Filippi S, Bertolaso M (2014) Why network approach can promote a new way of thinking in biology, hosted by Dr(s) Xiaogang Wu, Hans Westerhoff, Pierre De Meyts, Hiroaki Kitano in Frontiers in Genetics (Systems Biology), Vol 5 (83), 1-5. ISSN: 1664-8021

22. -Bertolaso M (2014) La complessità del cancro. Verso nuove categorie concettuali per comprendere la rilevanza del contesto, *Medicina & Storia*, Anno 14, 5 n.s.: 97-120. ISBN: 9788846739797/ISSN: 1722-2206

23. Loppini A, Capolupo A, Cherubini C, Gizzi A, Bertolaso M, Filippi S, Vitiello G (2014), On the coherent behavior of pancreatic beta cell clusters, *Physics Letters A*, 378: 3210–17. ISSN: 0375-9601

24. Di Stefano N, Bertolaso M (2014) Understanding Musical Consonance and Dissonance: Epistemological Considerations from a Systemic Perspective. In a Special Issue "Towards a Second Generation General System Theory", *Systems*, 2: 566-575. ISSN: 2079-8954

25. - Bertolaso M (2014), Il cancro e la sua complessità: aspetti etici ed epistemologici (Cancer and its complexity: epistemological implications) (Editorial), in “Cancer and its Complexity: Epistemological and Ethical Reflections”, Numero Speciale *Medic. Metodologia Didattica ed Innovazione Clinica*, M. Bertolaso (Ed.), Vol. (22) 2: 7-14. ISSN: 1824-3991

26. *Bertolaso M (2015), Emerging Epistemologies in life sciences, *Rivista di Filosofia Neo-Scolastica*, Vol. 1-2, pp. 29-35. ISSN 0035-6247

27. Bertolaso M; Capolupo A; Cherubini C.; Filippi S.; Gizzi A.; Loppini A.; Vitiello G. (2015), The Role of Coherence in Emergent Behavior of Biological Systems, *IEBM: Electromagnetic*

Biology and Medicine, 34 (2), 138-140, ID: 1036069 ISSN: 1536-8378

28. - Di Bernardo M, Dieli AM, Bertolaso M (2015) Thinking out of the box: Education as a Relational Challenge (Pensare fuori dagli schemi: l'educazione come sfida relazionale), *Medic. Metodologia Didattica ed Innovazione Clinica*, 23(1): 90-96. ISSN: 1824-3991

29. *Bertolaso M, Caianiello S (2016) Robustness as Organized Heterogeneity, *Rivista di Filosofia Neo-Scolastica*, Vol. CVIII (2), pp. 293-303. ISSN 0035-6247

30. - Valera L & Bertolaso M (2016) Understanding biodiversity from a relational viewpoint, *Tópicos, Revista de filosofía* Vol 51, 37-54. ISSN: 0188-6649

31. Giuliani A, Bartolini E, Bertolaso M (2016), L'humus della scienza: per una necessaria riscoperta della meraviglia e della cooperazione nella ricerca scientifica. *Scienze e Ricerche*, 28:1-4. ISSN: 2283-5873

32. *Bertolaso M. & MacLeod M (Eds) (2016) In Silico Modeling: the Human Factor, *Humana.Mente Journal of Philosophical Studies*, Vol. 30 III-V, pp. III-XV. ISSN 1972-1293

33. Bertolaso M, Di Bernardo M (2016) Questioni Epistemologiche Emergenti nelle Bio-Discipline (Epistemic Values at the intersection of Bio-Techno-Practice. An introduction to Biodisciplines) in *Biodisciplines* (a cura di Marta Bertolaso e Mirko Di Bernardo), *Scienze e Ricerche*, 30: pp. 5-8. ISSN: 2283-5873

34. -(*) Bertolaso M, Frezza G (2016), Bio-techno-practice: personal and social responsibility in the academic work (Bio-techno-practice: responsabilità personale e sociale nel lavoro di ricerca), *MEDIC. Metodologia Didattica ed Innovazione Clinica* 2016; 24(1): 75-84. ISSN: 1824-3991

35. -Bertolaso M (2016) Maternità surrogata, in "Nobiltà del nascere" (Maria Pia Garavaglia & Paola Binetti, Eds), *L'Arco di Giano*, Rome, numero 88, pp. 67 – 75. ISSN: 1721-0178

36. Bertolaso M, Mitchell SD (2017), Pluralismo integrador. Un nuevo enfoque para comprender la complejidad biológica *Investigación y Ciencia*. pp. 50-51, Gennaio, N. 484, ISSN 0210-136X (<https://www.investigacionyciencia.es/revistas/temas/filosofa-de-la-ciencia-801/pluralismo-integrador-14839>)

37. -Bertolaso M (2017) Building bridges - Between, in and for the philosophy of biology. Introduction to the Monothematic Section, in *Emerging trends in Philosophy of Biology* (Ed. Marta Bertolaso), *Acta Philosophica*, 26 (1): 11-18 ISSN: 1121-2179

39. *Bertolaso M, Della Rocca M (2017) On the Processes of Growth of the Living Being and the Relevance of Relational Categories to Understand it, annata CIX, fascicolo 2, *Rivista di Filosofia Neo-Scolastica*, pp. 255-268 ISSN: 0035-6247

40. *Bertolaso M (2017), Uncoupling Mereology and Supervenience: A Dual Framework for Emergence and Downward Causation, in "Causality and Explanation in Scientific Practice" (Evandro Agazzi, Marco Buzzoni Eds), *Axiomathes*. Vol. 27, Issue 6, pp. 705-720 ISSN: 1122-1151

41. *Bertolaso M, Sterpetti F (2017), Evidence amalgamation, Plausibility and Cancer Research, *Synthese*, pp. 1-39, S. I. Evidence Amalgamation in the Sciences, ISSN: 0039-7857, DOI 10.1007/s11229-017-1591-9

42. Bertolaso M, Dieli AM (2017), Cancer and Intercellular Cooperation, Royal Society Open Science, pp.1-14. ISSN: 2054-5703, DOI 10.1098/rsos.170470.
43. *Osimani B, Bertolaso M, Poellinger R, Frontoni E (2018), Real and Virtual Clinical Trials: A Formal Analysis, in “Foundations of Clinical Reasoning: An Epistemological Stance” (Mattia Andreoletti (Campus IFOM-IEO, Milan), Paola Berchiolla (University of Turin), Giovanni Boniolo (University of Ferrara), Daniele Chiffi (Tallinn University of Technology) Eds), *Topoi*, pp. 1-12 ISSN: 0167-7411, DOI: 10.1007/s11245-018-9563-3
44. *Sterpetti F, Bertolaso M. (2018): “The Pursuit of Knowledge and the Problem of the Unconceived Alternatives. An International Review of Philosophy”, *Topoi.*, pp. 1 – 12, ISSN: 0167-7411, doi: 10.1007/s11245-018-9551-7
45. Bertolaso M, Valera L (2018), Verità e fiducia nell’era del Transumanesimo, in SCIO – Revista de filosofía XV, pp. 97-122, ISSN: 1887-9853
46. *Plutynski A, Bertolaso M (2018), What and How Do Cancer Systems Biologists Explain? *Philosophy of Science*. Vol. 85, Issue 5, pp. 942-954, ISSN: 0031-8248, DOI: 10.1086/699716
47. Bertolaso M, Rocchi M, (2020) Specifically Human: Human Work and Care in the Age of Machines, in Special Issue: The Meaning of Work in the Fourth Industrial Revolution, *Business Ethics: A European Review* (Juan Fontradona, Ed.), ISSN: 0962-8770, DOI: 10.1111/beer.12281
48. Bertolaso M (2019), Artificialmente e Umanamente: Epistemologie a Confronto, in *Transizione digitale* (Stefano Zamagni, Ed), *Paradoxa* 2/2019, pp. 137-149.
49. Brizi M R, Pennacchini M, Bertolaso M, Ageing and working capability: volunteer work as a means to an active longevity, in *Medic* 2019, 27(2): 100-108.
50. Bertolaso M, Corti L, (2019), Prospettive sulle/delle metamorfosi tecnologiche, in “Metamorfosi del vivente”, *ATQUE* 24 n.s./2019, pp. 63-84.
51. Bizzarri M, Giuliani A, Pensotti A, Ratti E, Bertolaso M (2019), Co-Emergence and Collapse: the Mesoscopic Approach for Conceptualizing and Investigating the Functional Integration of Organisms, in *Front. Physiol.* DOI: 10.3389/fphys.2019.00980
52. *Bertolaso M, Campaner R, (2020) Scientific Practice in Modeling Diseases: Stances from Cancer Research and Neuropsychiatry, *The Journal of Medicine and Philosophy: A Forum for Bioethics and Philosophy of Medicine*, ISSN: 0360-5310
53. * Loppini A, Cherubini C, Bertolaso M, Filippi S (2020) Breaking down calcium timing in heterogenous cells populations, *Biosystems*, <https://www.sciencedirect.com/science/article/pii/S0303264720300241?via%3Dihub>; <https://doi.org/10.1016/j.biosystems.2020.104117>
54. Corti L, Bertolaso M (2020) Embodiment from philosophy to life science and back. *Ludus Vitalis*, vol. XXVII, num. 52, 2019, pp. 137-142.
55. Roncella A, Bertolaso M (2021) A generative paradigm for human work. Meritocracy and value creation in a post COVID-19 world. In “The future of work” special issue (Martin Schlag Ed), *Journal*

for Business and Professional Ethics (JBPE).

56. Bertolaso M (2021) Il fattore umano nelle transizioni digitali, in “Intelligenza artificiale e dottrina sociale della Chiesa” (Markus Krienke , Ed), *La Società*.

57. * Corti, L., Di Stefano, N., Bertolaso, M. (2022), Artificial Emotions: Toward a Human-Centric Ethics, *International Journal of Social Robotics* <https://doi.org/10.1007/s12369-022-00890-1>

58. Bertolaso, M., & Rocchi, M. (2022). Specifically Human: Human Work and Care in the Age of Machines. *Business Ethics, the Environment & Responsibility*, 31(3), 888–898. <https://doi.org/10.1111/beer.12281>

59. * Militello G, Bertolaso M (2022) Stem cells and the Microenvironment: Reciprocity with Asymmetry in Regenerative Medicine, *Acta Biotheoretica*.

60. Corti, L., Afferni, P., Bertolaso M. (2020-2021), Healthcare 4.0 and Human-Centric Approach, *MEDIC* 28(2)-29(1), pp.16-24

61. Bertolaso M., Boschetto E., (2022), *La qualità delle relazioni per la gestione delle organizzazioni complesse nello spazio post-pandemico*, Rivista dell’AICQ Associazione Italiana Cultura Qualità, per il numero 6/22 "RAGIONARE PER MODELLI E TRAIETTORIE"

62. Bertolaso M (2022) Governare la complessità oggi: tra innovazione e senso dell’appartenenza, *ISPER Rivista Personale e Lavoro*, n 646 (luglio 2022)

63. Bertolaso M (2023), I luoghi della ri-nascita, in *Guarire. Riparare, rinascere, prendersi cura*, La Meraviglia del Possibile, pp. 151-157, LUISS marzo 2022

64. M. Bertolaso, M. Daverio, Intelligenza artificiale e sapere scientifico: la scienza rimarrà umana?, “Munera. Rivista europea di cultura” 2/2022, pp. 25-36. ISSN rivista: 2280-5036

65. Corti L, Brizi MR, Pennacchini M, Bertolaso M (2023) Technological grandparents: how communication technologies can improve the well-being of the elderly? *AI & Society*, <https://doi.org/10.1007/s00146-023-01645-w>

66. Pradeu et al. (2023) Reuniting philosophy and science to advance cancer research, *Biol. Rev.* (2023), pp. 000–0. doi: 10.1111/brv.12971

67. Capone L, Rocchi M, Bertolaso M (2023) Rethinking “digital”: a genealogical enquiry into the meaning of digital and its impact on individuals and society, *AI & SOCIETY*.

68. Fung M.L., Tobing D.H., Bertolaso M, Potluri V.A. (2023) People-Centered Science and Digital Transformation: A Practical Proposal for the G7 and G20, <https://www.think7.org/publication/people-centered-science-and-digital-transformation-a-practical-proposal-for-the-g7-and-g20/>

69. Bertolaso, M, Sterpetti, F. (2023). Some Reflections on Mitchell’s Pragmatist Variant of Scientific Realism. *Theoria. An International Journal for Theory, History and Foundations of Science*, DOI: 10.1387/theoria.24085. ISSN: 0495-4548 (classe A Anvur 11C2).

70. Ilardo ML, Bertolaso M (2024), Exploring the Interplay of Causality Notions & Risk Concepts: Epistemological Implications, Teoria
71. Bertolaso M, Ilardo ML (2024) Epistemologia per un Etica del One Health, Rivista di Bioetica.
72. Pensotti A, Bizzarri M, Bertolaso M (2024) The phenotypic reversion of cancer: Experimental evidences on cancer reversibility through epigenetic mechanisms. *Oncology Reports*: <https://www.spandidos-publications.com/10.3892/or.2024.8707>
74. Caianiello S, Bertolaso M, Militello G (2023) Thinking in 3 dimensions: philosophies of the microenvironment in organoids and organs-on-chip, HPLS - <https://link.springer.com/article/10.1007/s40656-023-00560-z>
75. Bellazzi F, Bertolaso M (2024) , Emergence in complex physiological processes: the case of vitamin B12 functions in erythropoiesis, Systems
76. Andrea Pensotti, Marta Bertolaso, Mariano Bizzarri (2023) Is Cancer Reversible? Rethinking Carcinogenesis Models—A New Epistemological Tool. *Biomolecules*, 13, 733. <https://doi.org/10.3390/biom13050733>.
77. Barresi G, ..., Bertolaso M, ... et al (2024) Augmenting Human Experience and Performance through Interaction Technologies, Frontiers in Psychology, section Performance Science.

Proceedings - Conference papers

1. Lo Celso A, Bertolaso M (2008) Contenidos creativos que generan cultura. Análisis de las revistas Teenink y Tamezin. Actas del XXI Congreso internacional de comunicación: Los jóvenes y el nuevo escenario de la comunicación, EUNSA. ISBN: 978-84-313-2523-7
2. Frezza G, Keefe H, Bertolaso M (2017), Work of the Home and Social Relationships as a Guide to Domestic Care for the Elderly, in Ambient Assisted Living, Lecture Notes in Electrical Engineering, Springer, eBook, vol. 426, pp. 79-86 ISBN 978-3-319-54283-6 DOI 10.1007/978-3-319-54283-6 Hardcover ISBN 978-3-319-54282-9 Series ISSN 1876-1100
3. Brizi M R, Bertolaso M (2017), “The long road towards sustainability: the contribution of domestic work”, in “Il volto del lavoro professionale. Servizio alla famiglia e alla società”, Atti del Convegno “The Heart of Work - Quale anima per il lavoro professionale”, Pontificia Università della Santa Croce, Rome, 19-20 October 2017. Vol. V, pp. 107-122. ISBN: 978-88-8333-764-2
4. Capone L., Bertolaso M. 2020. A Philosophical Approach for a Human-centered Explainable AI. In Proceedings of the Italian Workshop on Explainable Artificial Intelligence co-located with 19th International Conference of the Italian Association for Artificial Intelligence (AIxIA 2020), vol. 2742(80-86). <http://ceur-ws.org/Vol-2742/short1.pdf>.
5. Bertolaso M., Boschetto E., (2021), *Managerial Sustainability for Relational Workplaces*, 21st International Symposium on Ethics, Business and Society - IESE Business School – University of Navarra

Main Books and Papers Reviews

1. -(*)Bertolaso M. (2007). La sfida della bioetica. La Vita, la Libertà e la Difesa della Dignità Umana (Life, Liberty, and the Defense of Dignity: the Challenge for Bioethics) di L. R. Kass. Recensione. MEDIC. Metodologia didattica e innovazione clinica, 15: 118-119. ISSN: 1824-3991
2. -Bertolaso M (2010) L'ordine della complessità di Alessandro Giuliani e Joseph P. Zbilut, Recensione, Acta Philosophica, 19 (1): 213-216. ISSN: 1121-2179
3. -(*)Bertolaso M (2016), Filosofia chimica di Ermanno Bencivegna e Alessandro Giuliani (Recensione), MEDIC. Metodologia didattica e innovazione clinica 2016, 24(1): 111-112. ISSN: 1824-3991
4. Bertolaso M (2017), REVIEW of: G. Boniolo & M.J. Nathan (eds.) Philosophy of Molecular Medicine: Foundational Issues in Theory and Practice, Routledge, 2017, Notre Dame Press.
5. Bertolaso M (2019) REVIEW di Evandro Agazzi, L'oggettività scientifica e i suoi contesti, Bompiani, Milano 2018. Un volume di pp. 760. In Rivista di Neoscolastica.
6. Bertolaso M (2018) REVIEW Mary Ann G. Cutter, Thinking through Breast Cancer. A Philosophical Exploration of Diagnosis, Treatment, and Survival, Oxford University Press, 2018, 256pp. Notre Dame Philosophical Reviews
7. Bertolaso M (2019) REVIEW of A. Plutynski, Explaining Cancer: Finding Order in Disorder, Oxford University Press, 2018, 224pp., ISBN 9780199967452. Notre Dame Philosophical Reviews
8. Bertolaso M (2019) Evandro Agazzi, L'oggettività scientifica e i suoi contesti, Bompiani, Milano 2018. ISBN: 88-452-9872-8, in Rivista di Filosofia Neo-Scolastica CXI (2019), 3, pp. 747-772. ISSN: 00356247 (print) – 18277926 (digital).

Book Chapters – CONTRIBUTO IN VOLUME (CAPITOLO O SAGGIO)

1. Bertolaso M, (2010) “Super-naturali” come vampiri: l'enhancement in medicina, in La Medicina dei Nuovi Vampiri, Vittoradolfo Tambone and Luca Borghi (eds). Academia Universa Press, pp. 100-115. ISBN: 978-8864440361
2. Bertolaso M, (2011) Le Human Enhancement Technologies e l'Irriducibilità della Complessità Biologica, in Migliorare l'uomo? La sfida etica dell'enhancement. S. Kampowski – D. Moltisanti (eds.) Cantagalli, Siena, pp. 35-58. ISBN: 978-8882726010
3. Bertolaso M (2013). Le frontiere dell'oggettività e le nuove prospettive aperte dalla ricerca oncologica. In: Elio Borgonovi e Paolo Tralongo. Contenimento Economico e Umanizzazione dell'assistenza. p. 41-57, EdiScience ISBN: 978-8895760292
4. Bertolaso M. (2013) Sull'irriducibilità della prospettiva sistemica in biologia. Un'analisi delle convergenze dei modelli interpretativi del cancro, in “Strutture di Mondo. Il pensiero sistemico come specchio di una realtà complessa.” (Urbani Ulivi L.), Vol. II, p. 143-169, Bologna, Il Mulino. ISBN: 978-8815139856

5. Bertolaso M, Giuliani A, Filippi S (2014) The Mesoscopic Level and its Epistemological Relevance in Systems Biology. In: Recent Advances in Systems Biology Research (André X. C. N. Valente, Abhijit Sarkar and Yuan Gao Eds) Nova Science Publishers, Inc., pp. 19-36 ISBN: 978-1-62948-736-6
6. Bertolaso M, Di Stefano N, Ghilardi G, Marcos A (2015) Bio-Techno-Logos and Scientific Practice –, in “The Future of Scientific Practice: ‘Bio-Techno-Logos’”, Bertolaso M. (Ed.), Pickering & Chatto Publishers, pp.179-191 ISBN: 978-1848935624, doi: 10.4324/9781315653693
7. Bertolaso M (2015) Philosophy within Science in “The Future of Scientific Practice: ‘Bio-Techno-Logos’”, Bertolaso M. (Ed.), Pickering & Chatto Publishers, pp. 1-12 ISBN: 978-1848935624, doi: 10.4324/9781315653693
8. Bertolaso M (2015) “Stabilità VS Specificità. La rilevanza delle categorie relazionali nelle scienze biologiche”, in “Strutture di Mondo” (Urbani Ulivi L. Ed.), Vol. III, 107-131. ISBN 978-88-15-25830-4
9. Di Stefano N & Bertolaso M (2016) Changing Framework in Explaining Complex Dynamics: Convergences on Systemic Accounts from Two Different Case Studies. In "Towards a post-Bertalanffy Systemics", Minati G., Abram M. R. and Pessa E., (eds.), Springer, New York, 159-167. ISBN: 978-3319243894, doi: 10.1007/978-3-319-24391-7
10. Bertolaso M, Güell F (2016) ¿Requiere la complejidad biológica un marco indeterminista? in "¿Determinismo o Indeterminismo? Grandes preguntas de las ciencias a la Filosofía", C. E. Vanney & J.F. Franck (eds.), Colección “De las Ciencias a la Filosofía”, Logos-Universidad Austral, Rosario-Pilar, pp. 277-307. ISBN 978-987-732-067-1
11. Bertolaso M. (2017), “A System Approach to Cancer. From Things to Relations”, in Green, S. (ed.), Philosophy of Systems Biology – Perspectives from Scientists and Philosophers. Dordrecht, Springer, History, Philosophy and Theory of the Life Sciences (HPTL), pp. 37-47. ISBN 978-3-319-46999-7, DOI 10.1007/978-3-319-47000-9
12. Bertolaso M (2016) “Disentangling Context Dependencies in Biological Sciences”, in L. Fellingine, F. Paoli, E. Rossanese (Eds) New Directions in Logic and Philosophy of Science, College Publications, London, pp. 245-255. ISBN 978-184-890-160-5, <http://www.collegepublications.co.uk/silfs/?00029>
13. Bertolaso M, Buzzoni M (2017), Causality and Levels of Explanation in Biology, in “Philosophical and Scientific Perspectives on Downward Causation”, Edited by Michele Paolini Paoletti and Francesco Orilia, Part II - Downward Causation and the Sciences, Routledge, pp.164-179 ISBN: 978-1138195059, doi: 10.4324/9781315638577
14. Bertolaso M, Di Stefano N (2017). Preface in: The Hand- Perception, Cognition, Action. SAPERE, Springer. Vol. 38, pp. V-VII, ISSN 2192-6255 ISBN: 978-3319668819, DOI 10.1007/978-3-319-66881-9
15. Marcos A, Bertolaso M (2018) “What is a Home? On the intrinsic nature of the home”, in The Home, Antonio Argandona (Ed), Edward Elgar, pp. 35-56, ISBN: 978-1786436566, DOI 10.4337/9781786436573

16. Bertolaso M, Dupré J (2018), A processual perspective on cancer, in “Everything Flows: Towards a Processual Philosophy of Biology” (Eds. J. Dupré and D. Nicholson), OUP, pp. 321-336 ISBN: 9780198779636
17. Bertolaso, M. (2018), "The Threshold of Scientific Rationality. The Relational Ontology of Levels: Emerging Epistemology for Biological Sciences", in Velázquez, H. (comp.), Tirant Lo Blanch, Madrid, ISBN: 9788417203573
18. Boem F, Malagrino I, Bertolaso M (2018), In Silico Clinical Trials: a Possible Response to Complexity in Pharmacology, in Uncertainty in Pharmacology (Ed. B. Osimani), Springer, p. 135-152.
19. Bertolaso M, Ratti, E (2018) Conceptual challenges in the Theoretical Foundations of Systems Biology, in Bizzarri, M. (ed.), Systems Biology, series: Methods in Molecular Biology, vol. 1702. New York, Springer, pp. 1-13, series ISSN: 1064-3745, ISBN 978-1-4939-7455-9, DOI: 10.1007/978-1-4939-7456-6_1
20. Bertolaso, M. (2018), "Be-Com-Ing: Cuestiones emergentes en el estudio de la unidad dinámica del organismo", in Velázquez, H., Contreras, L., Mendoza, F. (eds.), La unidad del viviente desde un enfoque interdisciplinario: del origen de la vida a la generación de hábitos. Una aproximación desde la filosofía y las ciencias biológicas., Comares, Granada
21. Bertolaso M, Güell F (2018), ¿Requiere la complejidad biológica un marco indeterminista? in Vanney, C. E., & Franck, J. F. (Eds.). (2018). ¿Determinismo o indeterminismo? Grandes preguntas de las ciencias a la filosofía (2 ed.). Madrid: Universidad Francisco de Vitoria, pp. 265-295. ISBN 978-84-16552-95-5
22. Bertolaso M, (2018), “Introduction: Issues About Robustness in the Practice of Biological Sciences”, in Bertolaso M, Caianiello S, Serrelli E (Eds), Biological Robustness - Emerging Perspectives from within the Life Sciences, in History, Philosophy and Theory of the Life Sciences, vol. 23. Springer, ISSN: 2211-1948
23. Brizi MR, Bertolaso M (2019) "Sostenibilità e generatività: alcune considerazioni sulla condizione femminile ai margini dell'enciclica Humanae Vitae" in Humanae Vitae (Ed. Domenica Leone), Cacucci Editore
24. Brizi M R, Bertolaso M (2019), Per una nuova idea di progresso: quale solidarietà per uno sviluppo sostenibile? In “Dalla società fordista alla società digitale” Nunziante Mastrolia (Ed), Licosia Editore.
25. Bertolaso M (2021) Understanding Complexity in Life Sciences, in “Environmental Alteration Leads to Human Disease A Planetary Health Approach” (Ed. Vittorio Ingenioli), Sustainable Development Goals Series, Springer.
26. Militello G, Bertolaso M (2020) The Complexity of Tumor Heterogeneity: Limitations and Challenges of the Pharmacogenomics in Cancer Treatment, in Personalized Medicine (Beneduce C and Bertolaso M, Eds), Springer, in press.
27. Bertolaso M, Marcos A (2021) Technological changes and rights evolution in the bio-digital era: A philosophical overview, in Cambridge Handbook of Life Science, Information Technology and

Human Rights, Laura Liguori, Oreste Pollicino, Marcello Ienca, Elisa Stefanini e Roberto Adorno (Eds).

28. Bertolaso M (2021), Human Work and Automation: Negotiating the Tension Between Solitude and Relations, in Dignity and the Future of Work in the Age of the 4th Industrial Revolution, http://www.pass.va/content/scienze sociali/en/publications/studiaselecta/dignity_of_work.html .

29. Bertolaso M, Capone L (2020) Forma e Materia. Schizzi preliminari per una teoria del dato, in Etica Digitale (Marta Bertolaso, Giovanni Lo Storto, Eds), Luiss editrice

30. Bertolaso M, Marcos A (2020) Para una concepción humanista de la tecnología. Reflexión crítica sobre la era bio-digital, en la Serie *Sociedad Tecnológica y Futuro Humano*, vol. 1: *Desafíos conceptuales*, Héctor Velazquez (Ed), Editorial Tirant Lo Blanch S.L./Universidad Mayor, in press.

31. Bertolaso M (2020) *Leaders del fare (pro)positivo*, in “Sulla rotta del nuovo mondo. CEO on board” (Serena Bianchini, Valeria Bonilauri, Marco Chiesa, Annalisa Galardi, Annachiara Moltoni, Cosma Panzacchi, Paola Perna, Eds). www.mindsetrevolution.elis.org/ceoonboard

32. Bertolaso M and Strauss B (2021) The search for progress and a new theory framework in cancer research in Strauss B, Bertolaso M, Ernberg I, Bissel M (Eds) *Rethinking cancer- A New Paradigm for the Postgenomics Era* MIT press (in press) <https://mitpress.mit.edu/books/rethinking-cancer>

33. Bertolaso M (in press) Next Normal- Dal paradigma del controllo al paradigma della cura. In *Next Normal* (S. Maffettone, A. Del’Erario Eds), LUISS Editrice.

34. Bertolaso M (2021) *Complexity and Management: Epistemic Insights from Life Science* in Handbook of Philosophy. Handbook of Philosophy of Management (Eds. M. Dibben, M. Segal).

35. Bertolaso M and Velázquez H (2021) The Epistemology of Life - Understanding living beings according to a relational ontology, “From Electrons to Elephants and Elections: Saga of Content and Context” Shyam Wuppuluri FRSA (Ed), Springer.

36. Bertolaso M, Beneduce C (2021) *A Brief Reflection on Personalized Medicine. Philosophical Perspectives from Biology to Healthcare* en (Velázquez, H. ed.) “Sociedad Tecnológica y Futuro Humano, vol. 3: Retos sociales y tecnología”, Editorial Tirant Lo Blanch S.L./Universidad Mayor

37. Di Fausto D, Bertolaso M, Boschetto E (2021) Dagli Head Quarter Agli Hub Quarter: Verso Il Relational Workplace, in “i tre nodi dell’hr: digilità, umanità, spazialità” (Ornella Chinotti e Andrea Granelli, Eds), Harvard Business Reviews

38. Bertolaso M (2021) Perché le soluzioni uniche non sono una soluzione, in "*Scienziati in affanno? Scienza, politica e società: l’approccio post-normale in teoria e nelle pratiche*" (Alba L’Astorina, Cristina Mangia (a cura di)). 2021 © Cnr Edizioni- ISBN: 978-88-8080-277-8 – CARTACEO / 978-88-8080-279-2 – DIGITALE

39. Bertolaso M (2023) Gli spazi della relazione. La logica sistemica per lo sviluppo dei territori in “*RIPARTIRE DAI TERRITORI. La rigenerazione dei territori come strumento di sviluppo economico e sociale*”, Boschetto E., Granelli A. (Eds.), Fondazione Venture Thinking & The Thinking Watermill Society. In pubblicazione

40. Marta Bertolaso – Enrico Marzano - Marcella Trombetta (2024) A community-centered approach for the Sustainability and the One Health agendas. Campus Bio-Medico' Social Green Master Plan as a case study. In "Home, Family and Climate Change - Understanding the power of home to transform societies in the face of Climate Emergency"
41. Alfredo Marcos & Marta Bertolaso (2024) Technological Humanism & Sustainable A.I., in "Digital Environments & Human Ecology" (Fabris A & Belardinelli S, Eds). Springer.
42. Ledda M, Bertolaso M (2024) Mesoscopic patterns as interfaces for complex systems analysis, in "Systems Biology II", Springer
43. Bertolaso M, Sangiovanni-Vincentelli A (2024) I luoghi dell'innovazione, in Lo spazio oltre lo spazio (Boschetto Emiliano Ed), Rubettino

Special Issue (Editor) – CURATELA

1. Bertolaso M (Ed) (2017) Emerging trends in Philosophy of Biology. Acta Philosophica ISSN: 1121-2179
2. Bertolaso M. & MacLeod M (Eds) (2016) In Silico Modeling: the Human Factor, HUMANA.MENTE Journal of Philosophical Studies. ISSN: 1972-1293
3. Bertolaso M, Di Bernardo M (Eds) (2016) Bio-Disciplines, Scienze & Ricerche. ISSN: 2532-134X
4. Bertolaso M (Ed) (2014), Cancer and its Complexity: Epistemological and Ethical Reflections, Special Issue, Medic. Metodologia didattica ed innovazione clinica, Vol. 2. ISSN: 1824-3991

Entry for Enciclopedia – VOCE (IN DIZIONARIO O ENCICLOPEDIA)

1. Bertolaso M, James f. O' Brien, August Edward Manier (2013). Mechanisms. In: New Catholic Encyclopedia Supplement 2012-13: Ethics and Philosophy, vol. 1. Detroit: Robert L. Fastiggi, pp. 982-991 ISBN: 978-1414480855, https://www.cengage.com/search/productOverview.do?N=197&Ntk=P_EPI&Ntt=21135528693655775214795319621571820665&Ntx=mode%2Bmatchallpartial
2. Bertolaso M, Cerezo M (2017). Robustez Biologica. In Diccionario Interdisciplinar Austral, Claudia E. Vanney, Ignacio Silva y Juan F. Franck. (Eds), pp. 1-31 ISSN: 2524-941X
3. Dieli AM, Bertolaso M (2017) Selección natural. In Diccionario Interdisciplinar Austral, Claudia E. Vanney, Ignacio Silva y Juan F. Franck. (Eds), pp. 1-16 ISSN: 2524-941X
4. Bertolaso M (2017) Organismo. In Diccionario Interdisciplinar Austral, Claudia E. Vanney, Ignacio Silva y Juan F. (Eds), pp. 1-26 ISSN: 2524-941X

Books – MONOGRAFIA O TRATTATO SCIENTIFICO

1. Bertolaso M (2012) - Il Cancro come questione. Modelli Interpretativi e Presupposti Epistemologici, Monografia, Franco Angeli, Milano. ISBN 978-88-568-4629-4
2. Bertolaso M (2013) - How Science works. Choosing Levels of Explanation in Biological Sciences, Aracne s.r.l., Rome. ISBN 978-88-548-6088-9
3. Bertolaso M (2015) "The Future of Scientific Practice: 'Bio-Techno-Logos'", Bertolaso M. (Ed.), Pickering & Chatto Publishers. London:Pickering and Chatto Publishers, ISBN: 978-18-489-3562-4, doi: 10.4324/9781315653693
4. Bertolaso M (2016) Philosophy of Cancer – A Dynamic and Relational View. Springer Series in "History, Philosophy and Theory of the Life Sciences" 18. ISBN 978-94-024-0863-8
5. Bertolaso M, Marcos A (2023) Umanesimo Tecnologico. Una riflessione filosofica sull'I.A. Carocci editore.

6. Bertolaso M, Giuliani A (*forthcoming*) Abitare le Terre di Mezzo. Metodi e Modelli dei Sistemi Complessi
7. Bertolaso M, Marinucci A, Longo G, (*forthcoming*) I ritmi del vivente.
8. Bertolaso M, A. Marinucci (2024) Le domande aperte della vita. Epistemologia della Complessità. Rubettino.
9. Bertolaso M, Kovacic Z. (2024) Società Sostenibile (*forthcoming*). Rubettino

Edited Books – CURATELA

1. Bertolaso M (Ed) (2015), The Future of Scientific Practice: ‘Bio-Techno-Logos’, Pickering & Chatto Publishers, London. ISBN 978-18-489-3562-4
2. Bertolaso M, Di Stefano N (Eds) (2016) The Hand – Perception, Cognition, Action - Springer, SAPERE. ISBN: 978-3319668802
3. Bertolaso M, Caianiello S, Serrelli E (Eds) (2018). Biological Robustness - Emerging Perspectives from within the Life Sciences, in History, Philosophy and Theory of the Life Sciences, vol. 23. Springer, ISSN: 2211-1948
4. Bertolaso M, Sterpetti F (Eds) (2020), A Critical Reflection on Automated Science – Will Science Remain Human?, in Human Perspectives in Health Sciences and Technology, Springer.
5. Beneduce C, Bertolaso M (Eds) (2021), Personalized Medicine in the Making Philosophical Perspectives from Biology to Healthcare, in Human Perspectives in Health Sciences and Technology, Springer.
6. Strauss B, Bertolaso M, Ernberg I, Bissel M (2020) Rethinking cancer - A New Paradigm for the Postgenomics Era, MIT press (*forthcoming*) <https://mitpress.mit.edu/books/rethinking-cancer>
7. Bertolaso M, Lo Storto G (2021) Etica Digitale, Verità, responsabilità e fiducia nell’era delle macchine intelligenti, LUISS Editrice.
8. Bertolaso M, Capone L, Rodriguez-Llesma C (2022) Digital Humanism - A Human-Centric Approach to Digital Technologies, Palgrave (Springer)

Recent On-line Articles / Interviews

1. Interview for Marco Vigorelli Foundation: “Prospettive umane dell’Industria 4.0: tra Bio-Medicina e Tecnologia”, <https://www.marcovigorelli.org/prospettive-umane-dellindustria-4-0/>
2. Brizi M R, Bertolaso M (2018), “La cura e la sostenibilità”, in Studi e documenti, Fondazione Alberto Sordi, <http://www.fondazionealbertosordi.it/?p=1756>
3. Bertolaso M (2018), “Saremo governati dalle intelligenze artificiali? Riflessioni sul progetto di Macron”, Saluteuropa, in Uomo e Tecnologia, <https://saluteuropa.org/uomo-e-tecnologia/saremo-governati-dalle-intelligenze-artificiali-riflessioni-sul-progetto-di-macron/>
4. Bertolaso M (2018), “Ecco come tech e digital ci stanno rendendo più soli”, Saluteuropa, in Uomo e Tecnologia, <https://saluteuropa.org/uomo-e-tecnologia/ecco-come-tech-e-digital-ci-stanno-rendendo-piu-soli/>
5. Bertolaso M (2018), “Uomo e Tecnologia: dove stiamo andando?”, Saluteuropa, in Uomo e Tecnologia, <https://saluteuropa.org/uomo-e-tecnologia/uomo-tecnologia-dove-stiamo-andando/>
6. Bertolaso M (2019), “La semplicità nascosta della complessità biologica”, Saluteuropa, in Uomo e Tecnologia, <https://saluteuropa.org/uomo-e-tecnologia/la-semplicita-nascosta-della-complessita-biologica/>
7. Bertolaso M (2020) Dalle transizioni digitali ad un umanesimo tecnologico: <https://dirittodellinformazione.it/come-la-digitalizzazione-sta-cambiando-le-relazioni-umane/>
8. Bertolaso M (2020) per la Società di Filosofia Italiana (SFI): Dal paradigma del controllo al paradigma della cura: <https://drive.google.com/file/d/1lw15VseiQ6aipK2HgwE0BDPCsOnOaOnw/view>
9. Bertolaso M (2020) Intelligenza Artificiale e Società: tra Innovazione e Bene comune . <https://intelligenzaartificiale.unisal.it/marta-bertolaso-intelligenza-artificiale-e-societa-tra-innovazione-e-bene-comune/>

10. Bertolaso M (2020) <https://intelligenzaartificiale.unisal.it/dirette-streaming/>: Intelligenza artificiale e governance umana: prospettive educative e sociali
11. Bertolaso M (2020) https://27esimaora.corriere.it/20_aprile_30/a-venture-thinking-sabato-streaming-marta-bertolaso-scientziata-filosofa-uscire-crisi-natura-ci-insegna-fare-uso-perfetto-dell-imperfetto-30faefb4-8b27-11ea-a2b6-e57bd451de7e.shtml: Per uscire dalla crisi la Natura ci insegna a fare un uso perfetto dell'imperfetto.
12. Filosofia e Tecnologia: <https://www.solotablet.it/blog/filosofia-e-tecnologia/tecnologia-urgente-una-riflessione-critica-e-etica>
13. Etica Digitale: <https://www.letture.org/etica-digitale-verita-responsabilita-e-fiducia-nell-era-delle-macchine-intelligenti-marta-bertolaso-giovanni-lo-storto>
14. TEDx Luiss (May 2021): What does it mean to be human in the digital age? https://socialtv.luiss.it/video/tedxluiss-recharge/?fbclid=IwAR3etw30Cqls_20gj55jEZLC8TaIF2FxpCi7l5K-taIJiVRZiKdb-Arxio
15. Stroncature: Etica digitale - https://stroncature.substack.com/p/etica-digitale-a-cura-di-bertolaso?fbclid=IwAR0nSHG6gG0gl4QW0FHroPB6bP_wMxdaCxtQYDyY6jlYQBq_UDTUuF0kTQg
16. Rinascimenti Digitale – Confindustria Emilia Centro – 6 ottobre 2021: https://youtu.be/aMRqP1_vDLs
17. Confindustria 14 ottobre 2022: https://www.linkedin.com/posts/unindustria-reggio-emilia_assemblea-annuale-club-digitale-di-unindustria-activity-6990979720762802177-4e8X?utm_source=share&utm_medium=member_ios
18. <https://www.fortuneita.com/2022/11/18/marta-bertolaso-dalla-ricerca-sul-cancro-ai-nuovi-modelli-organizzativi-ed-economici/>
19. Bertolaso M (2022), Truth & Complexity. The role of trust in the relationship between humans and science: <https://thethinkingwatermill.com/marta-bertolaso-the-role-of-trust-in-the-relationship-between-humans-and-science/>
20. https://classagora.it/eventi/gli-stati-general-2023-dell-intelligenza-artificiale-2023?gclid=Cj0KCQiA6LyfBhC3ARIsAG4gkF9UXtMfSVQ_K75vTN6KHHDWnWzIhsQfVxydPncA8EMv-1kS1mKRV2saApwvEALw_wcB
21. Class: Stati generali: <https://video.milanofinanza.it/video/uomo-macchina-immortalita-l-ia-responsabile-al-tempo-di-chatgpt-0SSdDyRC6GwP>
22. <https://www.huffingtonpost.it/life/2023/07/09/news/marta-bertolaso-etica-cura-intelligenza-artificiale-campus-biomedico-12611298/>
23. Marta Bertolaso – Open Innovation Observatory - Opinion piece – Dec 02023 - I LUOGHI DELL'INNOVAZIONE SOSTENIBILE
24. Bertolaso M (2024) HEALTHCARE 5.0 – HealthTech360 - Digital360

Editorials and Articles for FORTUNE Italy 20230

- <https://www.fortuneita.com/2023/04/19/le-grandi-dimissioni-sono-anche-un-grande-risveglio-del-desiderio-di-appartenere-ad-una-comunita-di-persone/>
- <https://www.fortuneita.com/2023/03/22/chatgpt-se-il-valore-non-saranno-le-sue-risposte-ma-le-nostre-domande-sul-lavoro/>
- <https://www.fortuneita.com/2023/06/04/impres-il-baluardo-della-fiducia-nella-societa/>
- <https://www.fortuneita.com/2023/08/02/non-basta-un-leader-per-guidare-unimpresa-serve-un-leadership-team/>
- <https://www.fortuneita.com/2023/12/04/transazioni-relazioni-sfida-lavoro-umano-impres-umanistiche/>