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"Human Evolution 5.0" A new section in *Human Evolution*

(Pontecorboli Press)

Edited by Lucilla Spini

The international journal *Human Evolution* stems from a long tradition of publications on anthropological research and provides a record of different developments in the anthropological sciences, also related to the advent of new technologies.

In fact, scientists have been increasingly applying new technologies towards studying fossil specimens and furthering the understanding of human and non-human primates (see e.g., Gundling, 2010). *Inter alia*, we recall the innovative techniques in modern and ancient DNA analysis (e.g., Rogers & Gibbs, 2014), the utilization of 3D-Scanning and 3D-Printing (e.g., Martin, 2021; Walker & Humphries, 2019), computed tomography (e.g., Bernardini *et al.*, 2012) as well as the application of geotechnologies towards identifying fossils and non-human primates (e.g., d'Oliveira Coelho, Anemone & Carvalho, 2021; Bergl *et al.*, 2012).

Furthermore, new developments in technologies – especially Technologies 4.0 – are strongly impacting human behavior and human social organizations (e.g., Tuniz & Tiberi Vipraio, 2020) as well as natural evolutionary trends through "human enhancement" (see e.g., Almeda & Diogo, 2019) inducing discussions on ethical issues as well as the development of new concepts (e.g., "Life 3.0", *sensu* Tegmark, 2017)

However, there is no dedicated venue for publishing research on these themes within journals primarily focusing on human evolution; *Human Evolution* intends to provide such a space to address the interface between technological innovation and human evolution, in all its aspects and dimensions, towards defining "Human Evolution 5.0".

This new section – entitled "Human Evolution 5.0" and edited by Dr. Lucilla Spini – welcomes contributions on the following thematic streams:

1. the impact of new technologies (e.g., 3D-Printing, Ancient DNA, and computed tomography) in conducting research on human evolution;

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2. the possible roles of technologies (e.g., gene-editing and social robots) in altering the natural evolutionary trends in humans and in affecting human behavior and social organizations;

3. new and old concepts related to human evolution (e.g., "Life 3.0"), also with respect to current debates in "evolutionary robotics" (e.g., Harvey, Husbands, Cliff, Thompson & Jakobi, 1997) and "digital evolution" (e.g., Lehman, Clune & Misevic, 2020).

The journal welcomes original contributions from anthropologists, other social and natural scientists, engineers as well as practitioners. Contributions can be submitted as research article (7,000-8,000 words), commentary to a published article (3,000-2,000 words), book review (3,000-2,000 words), as well as interviews (3,000-2,000 words).

Prior submitting your manuscript, kindly review the *Human Evolution* webpage for journal's policies. All manuscripts will have to be prepared by following the Author Guidelines and sent as attachment (Word document) to Dr. Lucilla Spini via the following email address: info@pontecorboli.it with subject line:

"HUMAN EVOLUTION 5 - CONTRIBUTION BY (AUTHOR/S)".

All contributions will be peer-reviewed, authors can suggest possible reviewers in the email message when submitting the manuscript to the journal.

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Dr. Lucilla Spini is a biological anthropologist with expertise in sustainability, stakeholder engagement, and gender mainstreaming. Over the past 20 years, Dr. Spini has held various positions within the UN System and international NGOs, including as an Associate Expert at UNESCO Man and the Biosphere (MAB) Programme, Programme Officer for Environmental Conventions at FAO, and Executive Officer for the Global Environmental Change and Human Health Project at the United Nations University Institute for Water, Environment and Health (UNU-INWEH). She has contributed to international negotiations on environmental challenges and sustainable development, advised scientific committees, and contributed to scientific and UN publications. From 2015 to 2019, Dr. Spini co-organized, together with Colleagues from the World Federation of Engineering Organizations (WFEO), the Scientific and Technological Community Major Group at the UN for the 2030 Agenda and the Sustainable Development Goals. She has also served as an Adjunct Assistant Professor in Anthropology at the University of Waterloo and as an Adjunct Professor in the School of Geography and Earth Sciences at McMaster University, Recently, she has been a Giorgio Ruffolo Research Fellow in Sustainability Science at Harvard University's John F. Kennedy School of Government, a Policy Leader Fellow at the School of Transnational Governance of the European University Institute, and a Research Fellow at the Università degli Studi di Firenze. Dr. Spini holds a B.A. with Honors in anthropology from New York University (NYU), a Laurea in foreign languages and literature from the University of Florence, and a Master of Science (M.Sc.) in human biology and Doctor of Philosophy (D.Phil.) in biological anthropology, both from the University of Oxford (Linacre College).

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