

New book series

Human Perspectives in Bio-Medical Sciences and Technology

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Human Perspectives in Bio-Medicine and Technology publishes volumes that delve into the coevolution between technology, life sciences, and medicine. The distinctive mark of the series is a focus on the human, as a subject and object of research.

The series aims to provide an editorial forum to present both scientists' cutting-edge proposals in biomedical sciences which are able to deeply impact our *human* biological, emotional and social lives, and thought-provoking theoretical reflections by philosophers and scientists alike on how those scientific achievements affect not only our lives, but also the way we understand and conceptualize how we produce knowledge and advance science, so contributing to refine the image of ourselves as *human* knowing subjects. The main idea is that these are two sides of the same 'being-human' coin: scientific achievements can affect both our lives and ways of thinking, and, on the other hand, a critical scrutiny of those achievements may suggest new directions to scientific inquiry. So, although epistemological, social, and ethical issues are certainly all central for this series, what distinguishes it from other already existing series dealing with the same issues, is that it aims to address those issues from a less rigidly pre-defined disciplinary perspective and be especially attractive for non-mainstream views and innovative ideas in the biomedical as well as in the philosophical field.

Volumes in the series are characterized by:

- the dissemination of cutting-edge case studies and scientific excellence in bio-medicine and technology;
- a focus on scientific practice as a human (and therefore ethical) endeavor, involving philosophy, epistemology and the human and social sciences;
- new appraisals, perspectives and orientations for the readers to better understand and evaluate the technological and scientific advances of the contemporary world.

Technology and bio-medicine are coevolving in unprecedented ways, and much philosophical and human work needs to be done to deeply understand the modes and implications of these movements. Technological development has always offered new opportunities for scientific and social advancement. In the last decades, technology has entered in intimate partnership with the life sciences, providing tools to isolate and modify experimental systems *in vitro*, offering computational power to expand our cognitive capacities and grasp features of complex living systems, then introducing digital models and simulations, materializing methods to modify and

'rewrite' certain life processes and organismal traits, and allowing more daring and smooth hybridizations between artificial design and natural systems.

Incredible improvements to human life have come from these techno-scientific developments. Complex ethical questions have also arisen regarding the impact and the use of these developments and the ethically and socially responsible conduct of research. The new alliances between technology and bio-medical sciences have had a crucial testing ground within medicine and care sciences more generally. The life sciences, for their part, have been shaking their own paradigms and transforming the ways we conceptualize and deal with organisms and living systems, including humans. Bio-medicine is also the driving domain in which science is pushed further by real challenges, relevant questions, ethical issues and decision problems.

In fact, we live in a time of widespread worries and fears about science, and also of scepticism and resignation regarding the extreme complexity of living and social systems. Great expectations are placed on technology, and much of science is said to be technology driven, but human choice and responsibility remain ineliminable ingredients in the task of achieving knowledge about the natural world. A driving persuasion of Human Perspectives in Bio-Medical Sciences and Technology series is that a new trust in science is possible, but it must be based on a sound and up-to-date epistemology, and a recognition of the inherent ethical dimension of science as a human endeavor: the only way to understand and govern science and communities for the better is a view of science rich in all its human aspects, requiring the contribution of critical thinking, philosophy, epistemology, the human and social sciences.

The series is interested in receiving book proposals for both monographs and edited volumes that conform to the series aims and scope. The Series editors discourage the submission of manuscripts that contain reprints of previously published material and of manuscripts that are below 150 printed pages (75,000 words). In particular, the editors will appreciate proposals that consider and address one or more of the following aspects:

- The philosophical foundations and implications of bio-medicine
- The epistemological problems raised by bio-medical research
- The ethical issues raised by biomedical research and its applications
- The social impact of bio-medical and biotechnological innovation
- Bio-medicine, biotechnology and legal issues
- Bio-medicine and the future of humankind
- Bio-medicine and environmental thinking

All fields of the life sciences and technology in relation to medical care are expected to potentially provide cutting edge case studies. Some illustrative domains are: in silico medicine, big data and molecular medicine, molecular technologies (e.g., CRISPR), digital simulations of the brain, novel biotechnologies for human health and reproduction, prosthetics (artificial parts of human bodies), P4 medicine (personalized, predictive, preventive, participatory), ICT-based biomedical devices, digital twins, digital archives and personal privacy, mitochondrial transfer and 'gene correction' strategies for mitochondrial diseases, bio-piracy, bio-privacy, bio-robotics, food science and regulations, plastic surgery, aesthetic surgery, invasive/non-invasive surgery, drugs and complex diseases.

Although the involvement of **ethics** in the volumes of the series is welcome and absolutely central, the series is characterized by a particular ethical approach. First, it is an ethics seen not as an external limitation on science, but as internal to scientific practice itself as a human endeavor, i.e., the praxis that generates and defines the operation by which science makes its objects emerge. From this point of view, values for well-conducted scientific work stand out as particularly relevant. Second, it is an ethics characterized by a positive attitude towards science, trusting the history of science and the resources that, in science, may be promoted in order to orient science itself towards the common good for the future. This contrasts with a widespread negative attitude of some ethical schools, which focus only the detrimental effects of scientific and technological development.

The Series Editorial Board makes a first decision based on a detailed pre-proposal within 1 month of submission. In case of a positive first decision the work will be provisionally contracted: the final decision about publication will depend upon (1) the **successful transformation of the pre-proposal** into a sound and good book proposal, and (2) the result of the **anonymous peer review** of the complete manuscript. The series editors aim to have the work peer-reviewed within 3 months after submission of the complete manuscript.

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