Research Project

The aim of the project is to develop a new model of patient-physician relationship, identifying the impact of AI on its core elements, and integrating human and technological factors in a unified vision of care. As a matter of fact, AI in health care settings calls for an integration with the human factor to fight a scenario where human risks becoming mere data that can be collected and organized by algorithms, and where human core dimensions (such empathy, relation, trust, biographical aspects) and the very doctor-patient relationship become secondary elements.

On this basis, the project, aims at the following:
- To draw and apply a new paradigm of the doctor-patient relationship built on the principle of Human in the Loop, realising an appropriate human-artificial association in this field. To this end, it will be necessary to verify the meaning of the human-in-the-loop principle and its concrete and effective implementation in medicine and to assure the compliance with ethical and legal rules (see the final version of the AI act) which can help in re-founding an augmented and human centred medicine.
- To provide open access and interdisciplinary educational material (interdisciplinary reports, interactive webinars and meetings, scientific articles, etc) for the promotion of a new and effective version of the doctor-patient relationships that is more and more trustworthy and human-centred using AI.
- To draft participatory guidelines (taking into account interactions with and insights from doctors and health care workers) in order to shape a present and future integrative use of AI in health care sets that includes by-design empathy, social relations, biographical aspects.

In doing that, the research will have to address several challenges, such as the deskilling factor, the opacity derived from the black-box phenomenon, the risk of AI-generated discriminatory results, the overall weaking of the doctor-patient relationship. Since the very recent European agreement on the structure of the AI act, special attention will be given to the final version of the EU regulation (to be approved by February 2024), considering the impact of its legal tolls (such as the fundamental rights impact assessment, the requirements for high-risk systems, the risk management, etc.) on the possibility to build a medicine that, instead of been demonized by AI, is actually augmented by a virtuous use of it.