

## Umberto Veronesi

*Just under two years ago, Professor Umberto Veronesi agreed to be part of the Editorial Board of the Italian Journal of Gender-Specific Medicine. The position had been offered to him because of his attention to the gender dimension in all areas of health and his curiosity for all new things. It was during the Conference on "The Future of Science", sponsored by the Umberto Veronesi Foundation, that this journal was started in September 2015. This tribute to Professor Veronesi is authored by Chiara Tonelli, President of the "Umberto Veronesi Foundation" Scientific Committee and Secretary General of the Conferences on "The Future of Science".*

Umberto Veronesi was a great doctor, a great intellectual, an innovator, a civil rights advocate, a man of peace, a communicator, and above all a great defender of science and of the scientific method. He was a surgeon who had the courage to make difficult choices when it was not easy to do so, changing the way to treat patients, innovating oncological care and adopting personalised therapies. Always at the forefront in all medical, ethical and philosophical matters, he indicated the scientific method as a protection and an antidote against anti-scientific trends, and left us an amazing scientific legacy.

To Veronesi, the starting point was the individual, the relationship between the doctor and the patient. He often said that the physician's role is not to treat an organ, but the individual to whom the organ belongs, a living being made of body and mind, a human being with his or her own temperament and a wealth of knowledge, past, future, aspirations and frustrations, because pain and hurt do not affect only a person's body. And, he continued, "we must be able to cultivate not only scientific knowledge and technology, but also some skills that can prove more helpful than others: first of all listening, because what most comforts patients is to know they can talk about what is wrong with them; compassion, in order to understand the situation and work out

a truly shared therapeutic project; wisdom, a combination of insight, balance, and calm; independence, which is also a physician's right; fairness, because all discrimination in a clinical setting is inexcusable; patience; trust, in order to build a relationship leading to successful treatment and authentic human experience".

Veronesi has always followed a secular ethics, based in general on the self-determination of individuals and on the three principles of freedom, solidarity and tolerance. These were to him like beacons that he never tired of indicating to his collaborators and that inspired the activities of the Foundation he created.

Not coincidentally, he wanted the Umberto Veronesi Foundation to engage both in support to scientific research and in discussion on major issues of our time: conflicts, inequalities, environmental sustainability, bioethics, as he was convinced that the younger generation of scientists should be able to tackle new and urgent matters.

The world is changing at a rate that is unprecedented in human history: over a few decades, biomedicine has redefined the boundaries of the beginning and end of life and has tremendously advanced its ability to intervene on the environment and the human being through genomics, nanoscience, innovative drugs, transplants and stem cells. Scientific progress opens up new opportunities, but at the same time presents us with unprecedented challenges and deep moral dilemmas that must be addressed.

He also insisted that science should come out of the laboratories to meet the real world and the great problems of mankind: hunger, malaria, AIDS, cancer, infant mortality, environmental issues, energy sources and biodiversity.

Science possesses that universal language that allows dialogue even where it seems impossible, is based on respect for the positions of others and thrives on doubt and the rejection of dogmatism. In this respect, scien-



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tific progress remains the response of advanced mankind to the seduction of reactionary and absolutistic notions.

Knowledge is the only possible answer for mankind, if it wants to survive.

I remember his encouragement to demand the utmost commitment, earnestness and dedication from researchers, because hard work and perseverance are the keys to achieving long-lasting results. But at the same time, to make sure they did not lack opportunities, dignity and trust. He urged young researchers to never stop asking themselves questions, especially when the answers are harder to find, and to learn to disobey when necessary. Innovation is based, among other things, on the ability to transgress, he often said. Obedience in itself is not a value!

He himself had disobeyed the sacred rules of oncology as he tried to find new solutions for the treatment of breast cancer: how many women would have undergone unnecessary mutilations if he had respected the hierarchy of knowledge! The value of women and men, as people and scientists, is also in their ability to raise their eyes from the slides they are viewing and to look a little further, to take action for a better future as we imagine it.

Veronesi always thought that science is the most powerful tool available to mankind to improve people's quality of life and prospects. Its role affects not only the lives of individuals, but also that of the entire community, and helps to strengthen its level of civilization.

Expanding the boundaries of knowledge is an opportunity and at the same time a duty of the human being. This is why Professor Veronesi wanted his Foundation to promote the advance of science along two main directions: by developing a scientific culture and by supporting the work of young researchers. The areas on which the Veronesi Foundation scholarship holders focus their studies range from molecular biology to bioethics and from nutrigenomics to preventive medicine.

Through his Foundation, he made untiring efforts to promote dialogue between science and society, an issue he had particularly at heart in the last 15 years of his life.

In this regard, it is important to mention that Veronesi was a founder and, for 12 years, president of the world conferences on "The Future of Science". The aim of the Conferences was to define a new role for science in the third millennium society and to give back to science its central place in the cultural and social debate, in order to keep the global community informed on and involved in ongoing scientific advance and its increasing impact on human activities; and to affirm the ethical dimension of science alongside its rational dimension, through constructive dialogue between science and all the other cultural manifestations that make up the modern world, so as to establish a new reference point for the future. All these objectives are stated in the Charter of Venice, a consensus document that aims to involve a multidisciplinary team of experts with the intent to examine the ethical and social issues related to scientific innovations, and provide Governments and the public opinion clear and substantiated information on the potential of scientific thought and the ethical value of science.

Finally, we should also touch upon an initiative he strongly supported and of which he was particularly proud: the Science for Peace World Conference, which since 2009 has gathered in Milan prominent members from the world of science, the economy and culture, to discuss peace projects and to propose practical responses to the conflicts that bathe the world in blood. Peace is an indispensable condition for the cultural and scientific advance of mankind. As long as there is war there will be no justice, wealth, or health. Resources will not be equitably distributed, people will not have access to an education, a job, secure and sufficient food and water, a shelter for themselves and their families. Without peace, there is no real development.

Throughout his long life, Professor Veronesi ploughed a deep furrow.

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