

Greeting

Archbishop Vincenzo Paglia
Synthetic Biology Conference
The Ethics of Engineering Life
Monday, September 26, 2022
9:00 AM

I am pleased to offer my very cordial greetings to all present here in Rome and to all who are joining us online. In addition, I would like to offer particular thanks to our rapporteurs for generously sharing the results of their commitment and research.

The Pontifical Academy for Life is also very pleased at how the organization of this event reflects cooperation among the Academy, the Zurich-based National Centres of Competence in Research - Molecular Systems Engineering (NCCR - MSE), the University of Basel, the Federal Institute of Technology in Zurich (ETH Zurich), and the Bambino Gesù Pediatric Hospital in Rome.

The topic we will address is central to the Pontifical Academy's research and reflective thinking. We concentrate on the promotion of scientific-technological development, particularly in the area of life and health. We focus on an integral vision of the human person and of a society that is ever more just. Today, our commitment is inseparable from that care for our "common home" in which every form of life has its proper place on the planet, as Pope Francis insists with great vigor, especially in the Encyclical *Laudato si'*.

The topics that you will address in our conference are truly important. On the one hand, they deal with the borderlands of scientific research, given that biology and genetics have gone beyond simply describing phenomena. Now, they can transform the genome of living organisms, through techniques like gene editing and the production of organoids. On the other hand, they force us to deal with the interactions among science, technology, and society that have been sorely tried by the Covid-19 pandemic. It is therefore most important that we promote mutual knowledge and understanding among science, ethics, and civil authority.

This is a cultural task that must be studied more deeply, and in manner that is both serious and credible. In fact, the ways in which the scientific community reaches consensus on the value of experimental evidence reflect not just rigorous rationality but also, and necessarily, practical observation within a given cultural framework. The importance of culture—of a framework of symbols, beliefs and practices that give form and substance to the significant elements of life in a community—is often overlooked. We tend to consider science as only an exercise of abstract rationality that relies on rigorous experimentation. We forget that lived experience is the implicit background of every exercise of reason, and that reason always remains anchored to the basic elements of community understanding.

It is culture that shapes the conscience of individuals, who are always in relationship with, and responsible for, each other. In this context, one cannot “...continue to believe that facts [of which scientific knowledge and the results of its application are a part] stand up all by themselves, without a shared world, without institutions, without a public life,...” (LATOURE, *Down to Earth*, 25). If we see that scientific activity is integrated into a particular culture, we must consider that integration as a necessary starting point, without assuming it as a bias to be only eliminated. The important point is that between the cultures of peoples and the development of concepts there is a circular relationship. This relationship has a decisive role in arriving at a consensus on evidence and in establishing relationships with other forms of knowledge. I think this is why so-called “post-normal” science insists on the importance of involving as partners in dialogue persons who are outside the circle of experts. This ensures that scientific conclusions and practices will be subject to ever wider review, in an approach where knowledge is “co-constructed.” This will not only facilitate a deeper understanding and wider acceptance of scientific discoveries, but also an orientation of scientific-technological entities toward the real needs of society and the dignity of people, thus tending to counteract market greed.

In this perspective, I consider the *panel* where you will discuss the different religions as very important. You will need to consider the way in which they approach the questions raised by new perspectives on scientific research and on the socio-cultural repercussions of that research. But you will also need to

consider what role they are called to play in clarifying the meaning of scientific discoveries.

I repeat my cordial welcome to you, and I hope that these days will be fruitful for you and for the scientific community that is engaged in a research journey that will be of real support for the whole human family.