

Laboratory of Science Communication

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#### Research Summary

Life sciences are not only contributed to improving medical technologies and food production through the understanding of life phenomena but also provide new perspectives on life and social issues. Focusing on the social aspects of life sciences, we will conduct research from the perspectives of science communication, science education, and science and technology governance, targeting the issues between life sciences and society.

##### (1) Research on education for the use of life sciences

The development of genomic science has made it possible not only to diagnose and develop cures for diseases that were once difficult to cure, but also to predict diseases through personal genetic testing. In a society where such technology is expanding, people need to learn the scientific and social significance of "examining one's own genes" and be able to use it without misunderstanding. However, while Japanese secondary education deals with the conceptual understanding of DNA, genes, and genomes, there is no curriculum for learning about human genetic testing and genomic medicine. Therefore, we will focus on genomic medicine and regenerative medicine and develop an educational program that contributes to improving awareness of not only the benefits but also the challenges of each medical treatment and how to make decisions regarding its use.

##### (2) Developing public participation methods in biosciences

Among life science research, we will focus on life science research that involves the creation of human germ cells or the editing of the genome of human fertilized eggs, which are required to deal with ethical, legal, and social issues (ELSI) and may have an intergenerational impact. We will develop methods of dialogue that will contribute to the awareness of the public, the solicitation of opinions and the exchange of information on the progress of such research.