

Uehiro Research Div. for iPS Cell of Ethics

05 iPS細胞研究所 (CiRA) [Investigators] Uehiro Research Division for iPS Cell of Ethics



Toward clinical application of iPS cells with full public confidence

Japan was the first place in the world to begin iPS cell-based clinical research, and we are now finally reaching the stage where research activity aimed at clinical application is starting in earnest. If iPS cell research is to progress swiftly and successfully, it is essential to gain public confidence. With this aim in mind, our research group's missions are (1) to identify the bioethical issues which may arise as research progresses and to propose potential solutions; (2) to participate in research ethics support activities to ensure that research procedures are appropriate and comply with relevant laws, regulations, and guidelines.



Website of Uehiro Research Division for iPS Cell Ethics

Building a research ethics support system responsive to frontline needs

In fiscal 2013, with clinical research about to begin at CiRA, participation in research ethics support activities was made a priority issue. First of all, to identify where support needs lay and what their content was, and to clarify the knowledge and skills required to respond to these needs, we conducted interviews with individuals from inside and outside CiRA who had previously been involved in research ethics support, including researchers, support professionals, and members of ethical review boards. Based on our findings, we set about building a support system responsive to frontline needs and providing the relevant support. As part of specific activities to put the support system in place, we conducted workshops bringing together professionals involved in research support from inside and outside CiRA. The aims here were 1) to promote the sharing and practical

application of the knowledge and expertise required to carry out current clinical research plans; 2) to build and strengthen networks linking professionals engaged in research support.

Identifying issues in bioethics and proposing potential solutions

In the course of the interviews mentioned above, and from discussions within our research group, it emerged that, when we speak of 'research ethics support' we do not necessarily have a clearly outlined idea of who it should involve and what we expect them to do. This led us to the conclusion that, in order to establish the current situation and outline the issues, we needed to identify what kind of support system existed at facilities within Japan, chiefly in the field of regenerative medicine, and what kind of support is being provided. In fiscal 2013, we established an outline of the issues for debate. Now, from fiscal 2014, we plan to carry out fact-finding surveys by questionnaire, and use the findings as feedback for our support activities. Responding to other issues, we published research papers including a report on clinics in Japan offering stem cell therapy to private patients (*Oxford Uehiro Center for Practical Ethics*, 2013) and a commentary on the debate over 'enhancement' using regenerative medicine (*J Med Ethics*, 2013).



Department Head

Misao Fujita

MS, MPH, PhD.
Associate Professor

Born 1969 in Tokyo. Graduated from University of Tsukuba College of Human Sciences. After periods as a clinical psychotherapist at institutions including Obitsu Sankei Hospital and the Nihon University Itabashi Hospital Department of Psychosomatic Medicine, in 2006 completed doctorate in public health at Kyoto University Graduate School of Medicine, School of Public Health. In 2004, entered University of Tokyo Graduate School of Medicine, Center for Biomedical Ethics and Law, as researcher, later becoming research assistant professor, and assistant professor. Took up current position in May 2013.

mission
■ Identifying issues in bioethics and proposing potential solutions
■ Participation in research ethics support activities

- Members
- Associate Professor
Misao Fujita
Yoshimi Yashiro
- Researcher
Mika Suzuki
- Secretary
Emi Kuwabara



Yoshimi Yashiro

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Born 1976 in Nagoya, Aichi Prefecture. After graduating from Meijo University Faculty of Pharmacy, completed doctorate in etiology and pathology at University of Tokyo Graduate School of Medicine. Following appointments as assistant professor then research associate professor at the Keio University Center for Integrated Medical Research, and as lecturer at the Tokyo Women's Medical University Institute of Advanced BioMedical Engineering and Science, took up current position in 2013.

mission
<ul style="list-style-type: none"> ■ Dissemination of information on stem cell and regenerative medicine research that contributes to the creation of new understandings of life and ethics ■ Identification of attitudes to bioscience among the general public through surveys and subculture research

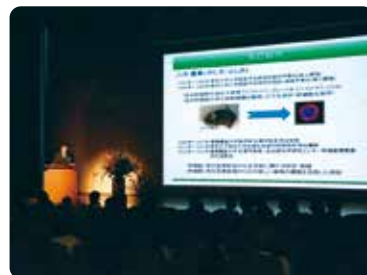
Ensuring proper public understanding to promote progress in regenerative medicine research

Since Till and McCulloch of Toronto University first demonstrated the existence of stem cells in 1961, related research has advanced rapidly. In the 20th century, following the discovery of the somatic stem cells which are present in various body tissues, embryonic stem cells (ES cells) – which are obtained from embryos immediately after conception – were used to establish cell lines that can differentiate into the various cell types that make up the body. Then, in 2007, human iPS cells were generated. Now, with the transplantation of human iPS cell-derived retinal cells planned in 2014, stem cell research is entering a new phase.

As stem cell research and other areas of regenerative medicine research have developed, they have become associated with phrases such as 'master cell' and 'ultimate medical treatment', which can lead to unrealistic expectations and misunderstanding among people and patients who have little experience of advanced or specialist sciences. Moreover, regenerative medicine research is a focus of bioethical debate because of its relevance to reproductive processes and the treatment of disease. In the future it is also likely to have an impact on society through the medical economy and other effects. All these factors underline



Books aimed at the general public



Lecture forming part of a commemorative symposium organized by the Uehiro Research Division for iPS Cell Ethics

the view that regenerative medicine research needs to progress on a foundation of public understanding.

Active information provision to non-specialists to anticipate ethical, legal, and social issues

In order to ensure that the advance of regenerative medicine takes place in harmony with society, we need to anticipate the ethical, legal, and social issues (ELSI) which may arise in the field of regenerative medicine, and actively provide non-specialists with opportunities to access advanced scientific knowledge in a concise form. We have made positive efforts to present relevant scientific findings and thereby inform the public about the current state of regenerative medicine research, using as platforms not only the existing media of television, radio, and newspapers, but also contributions to Internet media. In addition, we are using subculture channels which have hitherto been largely ignored, such as science fiction, manga comics, and animated films, to explore models for the integration of life sciences into society. In parallel, we are carrying out ethical research into the creation of new value systems and new understandings of life for a post-iPS cell society in which cell reprogramming has become possible, making relevant contributions to literary journals and a wide range of other media.

□Members

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