

Gene Technology Ethics and Community Consultative Committee

Meeting 24 May 2013

Canberra

COMMUNIQUE

The Gene Technology Ethics and Community Consultative Committee (GTECCC) held its third face-to-face meeting of the 2011-2014 Triennium in Canberra on 24 May 2013.

GTECCC is a statutory advisory committee established under the *Gene Technology Act 2000* (the Act) to provide advice to the Gene Technology Regulator (the Regulator) and the ministerial Legislative and Governance Forum on Gene Technology (LGFGT). The function of GTECCC is to provide advice to the Regulator and the LGFGT on request, on issues of ethical or community concern relating to gene technology. All Committee members and expert advisers hold office on a part-time basis.

The purpose of this Communiqué is to provide a brief overview of the key matters considered by GTECCC and resolutions of the committee at its meeting on 24 May 2013.

***In memoriam* – Professor Nancy Millis**

GTECCC acknowledged the passing in September 2012 of Professor Nancy Millis, AC FAA FTSE. GTECCC recalled that Professor Millis made an extraordinary and abiding contribution to the development of science-based regulation of gene technology in Australia over more than two decades as Chair of the Recombinant DNA Monitoring Committee and the Genetic Manipulation Advisory Committee. GTECCC members and guests at the meeting joined the Chair in paying their respects to Professor Millis by observing a moment of silence.

New appointments

GTECCC welcomed two new members to the committee: Professor Susan Dodds has been appointed as the cross-member with the NHMRC's Australian Health Ethics Committee, and Ms Judy Jones has been appointed as an Expert Adviser. These appointments were made in March 2013 by the Hon Catherine King MP, the then Parliamentary Secretary to the Minister for Health and Ageing.

GTECCC Work Plan

National Framework of Ethical Principles in Gene Technology

The revised *National Framework of Ethical Principles in Gene Technology 2012* (the National Framework), agreed to by GTECCC in May 2012, was published in July 2012 and widely distributed to stakeholders including all Institutional Biosafety Committees and accredited organisations, as well as biotechnology course coordinators. The National Framework sets out key principles and values to inform ethical considerations for gene technology and provides a reference point for promoting the ethical conduct of dealings with genetically modified organisms consistent with the national regulatory scheme.

Members were provided with positive feedback on the National Framework that had been received by the OGTR from stakeholders.

Synthetic biology

Whether synthetic biology raises new ethical issues has been discussed by GTECCC at previous meetings. At its 6th meeting in May 2012, GTECCC concluded that synthetic biology does not raise any new ethical issues, and that the known proposed applications of synthetic biology would be regulated under the *Gene Technology Act 2000* (the Act). GTECCC also agreed to maintain a watching brief on developments and reports regarding synthetic biology.

At the 7th GTECCC meeting, members were provided with a presentation from a PhD candidate from the Australian National University Law School on research into the ethical and legal issues around synthetic biology and its regulation. Members also received a report on a Scoping Workshop on “Synthetic Biology Futures in Australia?” from an officer from the National Enabling Technology Strategy (NETS; Department of Industry, Innovation, Climate Change, Science, Research and Tertiary Education).

GTECCC noted the updates in the area of synthetic biology and agreed that:

- GTECCC will continue to maintain a watching brief on developments and reports regarding synthetic biology, noting the rapid and ongoing developments in this field;
- most techniques related to synthetic biology to date would be regulated under the Act, noting that this is predicated on the definitions in the legislation. GTECCC understands that the 2011 review of the Act considered the issue of the definitions keeping pace with technological advances, and would be interested in being consulted on future proposals to change the definitions;
- GTECCC notes that synthetic biology in relation to animals is subject to additional regulation by animal ethics committees;
- GTECCC has considered several reports by expert groups that discuss synthetic biology. These reports have comprehensively covered scientific issues and also underline the importance of continuing social and ethical responsibility of scientists;
- the reports all discuss deliberative democracy and emphasize the need not only for public consultation, but for public engagement;
- GTECCC notes that the context for this issue also includes the debate around traditional intellectual property and the rapid expansion of open access science.

Community Consultation

An officer from the NETS provided GTECCC with a presentation of the key findings from the 2012 survey of Australian public attitudes towards biotechnology. Members noted that views for and against GM foods and crops have remained fairly consistent over the past few years, and that there are differences in attitudes to GM foods depending on gender, age and general attitude to science and technology.

GTECCC also received an update from the OGTR regarding the ongoing development of its communications strategy.

Resurrection of extinct species

The OGTR provided GTECCC with an overview presentation and some recent publications on scientific progress towards the resurrection of extinct vertebrate and virus species. Members noted the publication by Dewannieux et al. (2006), which reported the successful generation of a retrovirus that was calculated to have integrated into the human lineage around 5 million years ago, through use of bioinformatics analysis of the human genome and DNA synthesis. Members discussed the possible ethical considerations that the resurrection of extinct species may raise and concluded:

- some work in the area of resurrection of extinct species would be regulated under the *Gene Technology Act 2000*;

- there may be ethical issues in the viral work for further consideration, however the resurrection of vertebrate species will not be considered further by GTECCC at this time;
- the potential benefit of research is an important ethical consideration, noting however that the Regulator cannot take benefits of the technology into account when making licence decisions;
- the technical context, for example the level of containment, would be an important component of the assessment by the OGTR of any licence application for work relating to the resurrection of extinct viruses;
- GTECCC notes that the Regulator can seek advice on a specific application from the Gene Technology Technical Advisory Committee and GTECCC;
- GTECCC will consider doing some further work on this topic.

Nuffield Council on Bioethics publication

GTECCC discussed a recent publication from the Nuffield Council on Bioethics on *Emerging biotechnologies: technology, choice and the public good*. This document examines how we think about emerging biotechnologies and addresses the question of how a society should determine the conditions through which to foster socially and ethically responsible innovation in biotechnology.

GTECCC agreed the paper from the Nuffield Council on Bioethics is relevant to their work and links to several areas of interest to the committee including synthetic biology. Members commented that the paper provides a lot of useful information including clarification of definitions, precision of language, and comment on consultation and public engagement. GTECCC noted that the paper is set in the European context around public ethics, including the legal framework, which is different to that in Australia. GTECCC agreed to contact the Nuffield Council on Bioethics to inform them of the committee's consideration of the paper.

Issues for future consideration

GTECCC discussed several other areas of potential work, including contributing to ongoing communications activities of the OGTR.

Reports

The Committee received a report from the Gene Technology Regulator regarding the activities of the Office of the Gene Technology Regulator. Reports were also received from the committee's cross-members with the Gene Technology Technical Advisory Committee (GTTAC) and the Australian Health Ethics Committee (AHEC).

References

Dewannieux, M., Harper, F. Richaud, A., Letzelter C., Ribet D., Pierron G., Heidmann T. (2006). Identification of an infectious progenitor for the multiple-copy HERV-K human endogenous retroelements. *Genome Research* **16**: 1548-1556.

**For all inquiries, please contact the Office of the Gene Technology Regulator on
1800 181 030 (free-call)**