Editorial

I'm pleased to be writing this editorial in my role as the Associate Editor of the Journal of Law, Information and Science. This issue epitomises everything we are trying to achieve with this journal, with a fine mix of law, science and information technology. A number of the articles in this issue have been available online on the Journal's website for some time. I am delighted that we have been provided with resources from the Law Faculty at the University of Tasmania to see this issue through to publication. I thank Chun Yu immensely for her role as production editor of this issue.

The issue starts with an analysis by Bryanna Workman of the patent eligibility of prenatal diagnostic patents. Bryanna finalised this piece in 2018, and since then Beach J has handed down his first instance decision in *Sequenom Inc v Ariosa Diagnostics Inc* [2019] FCA 1011; (2019) 143 IPR 24 relating to the patent that formed the basis of Bryanna's analysis. More recently, the Full Court handed down the appeal decision on 18 June 2021 in *Ariosa Diagnostic Inc v Sequenom Inc* [2021] FCAFC 101. Both decisions upheld the validity of the patent. As such, Bryanna's conclusion of the likelihood that patent validity would be upheld was prescient. Indeed, her analysis aligns closely with those of the two courts.

Manfred Ewikowski and Lynden Griggs next turn attention to the inner mysteries of blockchain technology. They use the Iraq Food for Oil Programme as a case study to illustrate their thesis that the benefits of blockchain technology should be viewed with some caution, particularly by administrators of foreign aid programs. They particularly highlight the ineffectiveness of anti-corruption tools. As such, they recommend that if blockchain technology is used for the distribution of foreign aid, additional governance measures need to be put in place to guard against corruption.

Sara Smyth then probes the equally topical issue of regulating drone technology, using the US as a case study. The difficulty for countries with federated systems of government is how to establish uniform national regulation within the context of existing state-based regulatory regimes for aviation. Drones pose regulatory challenges within the context of traditional aviation regulation not least because they are remotely piloted, small and lightweight and fly at low altitudes. The fact that they are used for military, commercial and recreational purposes adds to the challenge. As drones continue to proliferate within commercial airspaces, the need for a robust regulatory framework becomes more pressing.

The next article is a co-authored piece by Jane Nielsen and myself. It reports the results of one aspect of a project funded by the Australian Research Council,

focusing on the use of material transfer agreements in biomedicine. The backdrop for the study included anecdotal evidence that the formalisation of transfer of materials between research laboratories was slowing the pace of biomedical innovation. The empirical study reported in this article involved interviews with personnel from the technology transfer offices of most of the major universities and research institutes in Australia, together with a survey of biomedical researchers, focusing on their involvement in and assessment of the material transfer process. The results indicate that although the material transfer agreement process can cause research delays, measures are being put in place to improve efficiency and reduce complexity.

In the next article, Kate Tokeley analyses the problem of camouflaged online advertising. She notes that traditional 'easy to spot' advertisements are being replaced with advertising that is 'seamlessly intertwined with the consumer's online entertainment, news gathering or social media experience'. This, she notes, poses a challenge for regulators. She particularly focuses on the problem of deception. Kate begins by examining new developments in marketing, going on to make a compelling case for legal intervention. She identifies the deficiencies of current laws in dealing with deception in advertising, before calling for a globally recognised disclosure standard. Her final radical recommendation is for a new funding model for content creators and media platforms.

Karinne Ludlow then examines Australia's regulatory response to the application of genome edited technology to plants. Karinne starts by pointing out that private actors are already stepping into the regulatory space, including by imposing restrictive terms in patent licences. However, as she rightly notes, in Australia the Office of the Gene Technology Regulator ('OGTR') and Food Standards Australia and New Zealand ('FSANZ') have the primary responsibility for regulating genetically modified plants. Gene editing techniques pose particular regulatory challenges. For example, in the simplest form of editing (known as SDN 1), no foreign DNA can be detected in edited cells. With no international consensus, the challenge for regulators is to decide whether or not such techniques come within the regulation designed for genetic modification techniques. Karinne highlights the difference in approaches between the OGTR and FSANZ, and raises concerns about ongoing regulatory uncertainties and the potential for overreach.

In the final article in this issue, Elliott Cook examines the impact of technology on the legal professions, with particular focus on artificial intelligence. He presents an optimistic viewpoint, arguing that legal professionals should not be too concerned about the future of their professions in light of these technological developments. He does emphasise, though, that the profession needs to be ready, willing and able to adapt. In so doing, however, they must adopt a critical and cautious approach 'with an eye to legal principle'.

Dianne Nicol

Associate Editor, 2021