Is ethics failing to keep up with scientific advances?

Our recent Spotlight on CRISPR, along with our news coverage of the creation of the first human–monkey chimera, raised interesting ethical questions. How long should a CRISPR-edited embryo be allowed to develop for? What about a chimera? Is editing ‘normal’ traits acceptable? These are all questions that have been raised and – according to our survey at least – remain unanswered, which suggests that our continuing advances in scientific abilities is outpacing what we feel comfortable with morally.

With ethical issues also being raised by advances in AI, data analytics and synthetic biology, it's clear that our increasing technical abilities need to come hand-in-hand with increased ethical oversight. This is happening to an extent – new ethics bodies are cropping up; for example, China has recently announced a plan to establish a national science and technology ethics committee, and the WHO has announced an advisory committee to develop global standards for genome editing.

However, these two committees at least feel somewhat like reactions to questionable research already performed – is there a way to proactively prevent research overstepping the ethical mark in the future without having a negative effect on advancement? Would something akin to the Hippocratic Oath – currently taken by physicians to ensure ethical practices – work if applied to those in the life sciences? Food for thought.

“...is there a way to proactively prevent research overstepping the ethical mark in the future without having a negative effect on advancement?”

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