The Importance of Ethics in Medical Biotechnology

The rapid progress of modern biotechnology has presented a number of new and unique ethical and social challenges within the context of human medical science. Research in medical biotechnology has led to increased knowledge of disease, acceleration of the treatment process, improved pharmacotherapy for infectious diseases and hope for the struggle against incurable diseases such as ALS, MS and Alzheimer’s. Medical biotechnology promises major advances in human health and therefore, any limitations on the right to freedom of scientific research should be for significant reasons only, and as least restrictive as possible, so as not to impede scientific wisdom and prevent damage to the scientific undertaking. At the same time a duty exists to ensure that research in this area of biotechnology is conducted in ethically acceptable ways. A balance needs to be struck between recognizing the potential benefits which biotechnology research offers to individuals and the community as a whole, and the duty to ensure that research in this area is conducted ethically.

Researchers in the biotechnology industry face challenges unlike researchers in other sectors. Unlike most other industries, advances and research in the biotechnology industry are often front page news and has to face intense scrutiny by press, academics, government and the public. As biotechnology is a newly emerging field, a further challenge facing the industry is the lack of historical precedent in the sector to provide guidance for the safe and ethical development of the technology. In biotechnology research, the usual ethical principles applicable to health research involving animals and human participants must be observed and such research must be scientifically sound.

References