Team 4 Transhumanism Executive Summary

As the transhumanism movement is taking off and new technologies are being developed and realized, taking the time to understand and prepare for the possible impacts of these new technological applications is just as important as continuing technical development. This report will suggest that the current North American engineering education is not preparing its students to position themselves as important moral gatekeepers of the very technologies they are developing for market. In addition, there are no regulatory agencies prepared to maintain positive applications for new technologies and block access for applications deemed to be destructive or have negative implications for the individual or society.

Research in the transhumanism sphere is abundant and has unlimited potential to improve the human condition. From aging to memory enhancement to organ function, recent research has shown promising advancements in all aspects of the human race in the spectrum of societies we live in. New technologies have historically had widespread positive effects on the individual and society, but also have another side, which, when left unchecked, were exploited by those in positions of power, wealth and destructive motivations to create negative impacts on safety, privacy, environmental health and peace. Negative impacts of technology are not always foreseen by the developers and marketers, but sometimes a side-effect of wide-spread use and adoption. For this reason, a world-wide regulatory agency would be helpful in the guidance and gatekeeping of new transhuman technologies.

Currently, engineers working to develop and promote transhuman research and technologies have little control of their intellectual property and have limited formal education in the sphere of business, philosophy, entrepreneurship, economics or politics. There has been an emergence of formal partnering of engineering and medical studies in this field, which is a great start, but these researchers and developers may not see the full impact of their work on society.

As engineering students, the authors of this paper promote the expansion of engineering education to include a more rounded curriculum including ethics, history, philosophy, business economics and politics. This will help give each individual graduating engineer a more holistic view of their work and the possible implication it may have. In addition to a wider education, engineers need to be supported in maintaining the ownership of intellectual property they develop. It is imperative that engineers gain more monetary support from their post-secondary institutions and their governments to develop their technologies into marketable products while maintaining ownership over their intellectual property. This will allow engineers and their chosen peers to work together in their vision of how and where their technology should and will be applied. Engineers with this deeper understanding of society as well as holders of their intellectual property will be better able to position themselves as moral and political leaders in decisions made around the implementation, distribution and regulation of their technologies.