

How to Boycott Animal Testing

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INTRODUCTION

Animal rights extremism is no stranger to the news headlines, with involved individuals moving from attacking large corporations to intimidating individual researchers. According to the National Association for Biomedical Research, “animal rights movement is a global movement that seeks to... stop the use of animals in research” among other things. Well, science might just be getting closer to giving these animal rights extremists what they desire.

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ANALYSIS

A study published in April 2014 in the American Chemical Society journal, reports the creation of a 3D model of the human airway that can be used for in vitro testing in the drug development process. This 3D model comprises a combination of airway epithelial cells, dendritic cells, and fibroblasts all cultured on a scaffolding involving electrospun porous fibres. Thus, an improvement from the 2D model typically used for in vitro testing, this model allows for cell interaction that mimics that which takes place inside the human lung.

CONCLUSION

The potential uses of this 3D lung model spans from academic to pharmaceutical research for the development of drugs. With this, it can be predicted that drug development costs will reduce, seeing as the need for animal models might be rendered obsolete. However, the replacement of animal testing by an in vitro 3D model is subject to FDA approval after adequate evidence has been garnered. Nonetheless, this has opened a new door to research while slowly closing the door of ethical dilemmas and negative public perception of research involving life organisms. One question that comes to mind, however, is that will it become eventually possible to eliminate the need for human subjects in research, especially in clinical trials? With the vast mountains that science and technology have managed to surmount, we just might be entering an era where these ethically controversial fields are able to resolve previous ethical dilemmas without instituting new ones. But as with every other hypothesis, only time will tell.