

Our multicultural, diverse team is united by our core values: environmental sustainability, ethical awareness, and the willingness to innovate. We decided to apply ourselves to solving the two of major hurdles in the culture media industry, its dependence on cheaper animal-based products and the high costs of production for non-animal-based alternatives.

To elaborate, current animal-based media on the market often makes use of animal-based serum (ABS) for its hormones to induce cell growth. Needless to say, others have attempted to address this issue by introducing recombinantly produced hormones into their media, reducing the need for ABS. However, this approach comes with the caveat of being an expensive and costly process.

This is where our team aims to innovate; currently we are developing a media that is based on engineered yeast strains with the ultimate aim of producing a culture medium that essentially grows itself. Our solution is two-fold, firstly the yeast is engineered to synthesise the necessary hormones, thus reducing the needs for ABS, then the yeast can be converted to yeast extract which would contain the essential nutrients. In the end, we would be left with a yeast extract already containing the required hormones and nutrients to induce cellular growth.

Currently, our team has secured funding and lab-space for developing a food-grade media specific to the Clean Meat industry, which evidently would benefit greatly from a product not depending on animal products. We aim to have a functional prototype by October 2019.

For the future, we are working towards becoming an established culture media business as well as developing our product range further to cater to a variety of large-scale cellular applications, and not be limited to the Clean Meat industry.

The Multus Media Team 06.06.2019