

# Cultured Meat – How to make it commercially viable?!



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**15 October 2020, 3.00pm**

Zoom

Host: Dr Kelvin Ng

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### Seminar Abstract

Cultured meats (CMs) are produced by *in vitro culture* of animal cells. CM could revolutionize meat production, providing a more sustainable and environmentally friendly alternative to conventional meat production. Since the first CM burger patty was created in 2013, many companies have sprung up to exploit the opportunity to produce and commercialize various kinds of CM products. While CM production is no longer just a dream, there are still pertinent challenges to be addressed before products are *consumer-ready and also commercially viable*.

This talk will touch upon the requirements in the scientific, sustainability, regulatory, funding and consumer behavior spaces in transforming CM into a viable commercial option! Significant improvements and modifications are needed for the biomanufacturing process to be cost efficient and robust enough to be brought to production at scale for food supply. Technological innovations could accelerate the timeline for the commercialization of CM products. It would be interesting to draw parallels from the remarkable explosion in plant-based meat alternatives in recent years!

### About the Speaker

Deepak is a passionate Research Scientist at the highly interdisciplinary BMT2 Group at BTI A\*STAR. He received his PhD in Bioeng. from NUS in 2012. His major research interests involve: edible scaffolds/biomaterials and biofabrication processes for CM applications, biomanufacturing of ECM, biomaterials, tissue engineering, bioinks development and organ-on-chips. He has worked with mammalian cells, animal tissues, plants, drosophila and zebrafish models. He has published a Cover Story article on "[The business of cultured meat](#)" which catalogued the various CM companies, meat focus, funding landscape etc. His dogged pursuit for comprehending the business, science and technology around CM space has led him to opine three more analyses in 2020: [Need for accurate nomenclature in CM space](#), [Exploiting 3D printing to design personalized CM products](#) as well as [Commercialization of plant-based meat alternatives](#). Over the years, Deepak has received competitive grants worth S\$2 Mil and has 4 patents and >25 publications to his credit. His first patent on creating a platform (VivoAlign) for cell alignment/ differentiation has been licensed. Deepak dreams to be a technopreneur in near future and invest his energy in building biotech/biomedical start-ups bringing higher value of his research to the society and SG economy!