Title of assignment: "Mapping actors, innovations and marketing strategies in the global alternative protein market" (Short title: AP mapping)

Replacing conventional meat with non-animal or lab-grown alternatives—'meat replacers'—is regarded as a crucial step towards sustainable diets. This 'protein transition' is a major research area, a hotly debated political topic, and a new commodity frontier for investors. The global alternative protein (AP) industry is also changing rapidly, with new technologies, products, and actors continuously emerging. Some of these changes are poorly understood, in particular when it comes to the role of regions outside the 'West'. This summer project will contribute with vital new insights to the changing geographies of APs and feed directly into the FRIPRO project *REPLACE - Meat replacement and systems of edibility in Asia and beyond*, hosted by Centre for Development and the Environment, UiO.

BACKGROUND

A substantial body of research has focused on technical solutions for, and consumer acceptance of APs. However, a notable lacuna in the research literatures around APs and meat replacement is the relationship between production, supply, and consumption. One of the most prominent strands of research in this area explores the 'promissory narratives' through which AP companies discursively position their products as solutions to environmental and public health issues (Guthman & Biltekoff 2021) and attempt to stabilise them as commercially-viable products (Broad 2020). Some studies investigate the scientific, political and institutional context in which AP products, such as lab-grown meat (Sexton 2020) or insects (House 2018), have been developed. Other research has explored issues around investment and funding, highlighting the role of venture capital in the development of these products and the various tactics used by companies to secure funding and attract potential employees (e.g. Biltekoff & Guthman 2023), as well as the tactics used by marketers to convince consumers to buy products (Fuentes and Fuentes 2023).

These debates have provided valuable insights into how APs become articulated as a feasible option for producers (Stephens 2022) and the complex geographies at work for products to even reach the supermarket shelves. Yet the emergence of 'plant-based capitalism' (Giraud 2021) and its global geographies in terms of actors, connections and ingredients, as well the broader global development of the AP sector as a distinct area of capitalist enterprise, remains largely unexplored, particularly outside the US.

The REPLACE project will develop a theoretical and methodological account of how things become qualified as edible, palatable and appropriate: in other words, how food becomes food (cf. Roe 2006). This approach focuses on APs and meat replacement but will benefit wider scholarship on food and dietary change, and efforts towards food system sustainability. The project will further explore meat replacement in Asian contexts and its global implications. Although home to significant regional variety, close to half of global meat consumption occurs in Asia (FAOSTAT 2023). Focusing on a range of meat replacers, such as plant-based meat analogues, insects and lab-grown meat, REPLACE will study production and consumption of meat replacers across scales and across key study sites in Asia (with Singapore and Vietnam as case countries), exploring how political-economic, cultural, social and material dimensions together shape whether products are qualified as edible, palatable and appropriate. This summer project will feed directly into the research in REPLACE by contributing to the knowledge base for further empirical investigations.

OBJECTIVES

The main objective of this summer project is to contribute to understanding the global web of actors, products and narratives involved in the alternative protein industry. The tasks of the student(s) will be to:

A) Examine digital and secondary sources to map/provide an overview of *one or several* of the following tasks:

- Main actors and investors in the global alternative protein industry
- Main innovation trends and prospects, as presented by key actors in the industry
- How market actors market and promote their products in relation to environmental and public health issues, including how marketing strategies differ between different regions

B) Identify and explore central developments or hotspots of activity in the AP market related to one or more of the task areas above.

SCOPE OF WORK

The students will work principally under supervision of Arve Hansen, Ulrikke Wethal and Johannes Volden. The students will be offered a desk (shared student office) at SUM and can benefit from contact with other researchers at SUM. The work is to take place principally in the summer of 2025 (preferably beginning in early June) and the report is to be submitted by 1st September to Hansen/Wethal/Volden. The scope corresponds to six weeks' full-time work, but the work can also be spread over a longer period according to the applicant's suited timeframe.

OUTCOME

The outcome is to be a report, with annexed background information and sources (guided by supervisors). We also encourage the candidate to publish a popular article (e.g. newspaper article) based on the work. In addition, there is a possibility that the data can be used as empirical basis for a co-authored research article (to be discussed between supervisors and the student).

APPLICATION

Preferred applicants are students enrolled in Master Programmes at UiO departments. The assignment is open to all candidates with at least one year of studies at the Masters level. Interested candidates must submit a statement of purpose/motivation and an overview of academic records and background. Number of available projects: 2.

REFERENCES

Biltekoff, C., & Guthman, J. (2023). Conscious, complacent, fearful: Agri-food tech's market-making public imaginaries. Science as Culture, 32(1), 58–82.

Broad G (2020) Making meat, better: The metaphors of plant-based and cell-based meat innovation. *Environmental Communication*. 14:7, 919-932.

FAOSTAT (2023). Food balances (2010-).

Fuentes, C., & Fuentes, M. (2023). Making alternative proteins edible: Market devices and the qualification of plant-based substitutes. *Consumption and Society*, 2(2).

Giraud, EH (2021) *Veganism: Politics, Practice, and Theory*. Bloomsbury Academic.

House, J. (2018). Insects as food in the Netherlands: Production networks and the geographies of edibility. *Geoforum*, 94, 82–93.

Guthman, J., & Biltekoff, C. (2021). Magical disruption? Alternative protein and the promise of de-materialization. *Environment and Planning E: Nature and Space*, 4(4).

Roe, E. J. (2006). Things becoming food and the embodied, material practices of an organic food consumer. *Sociologia Ruralis*, 46(2), 104–121.

Sexton, A. E. (2020). Food as software: Place, protein, and feeding the world Silicon Valley–style. *Economic Geography*, 96(5), 449–469.

Stephens, N. (2022). Join our team, change the world: Edibility, producibility and food futures in cultured meat company recruitment videos. *Food, Culture & Society*, 25(1)