Recommended Readings, Videos, and Other Sources:

1. Please watch this short video (3.31 min) featuring David Zilber, a chef and fermenter from Copenhagen, giving hints about fermentation and sustainability. He also served as the head of the Fermentation Lab at Noma, which was once considered the best restaurant in the world.
https://www.youtube.com/watch?v=g_TiCSNlnzU

2. Please explore the two websites listed below, both dedicated to different projects from Rob Dunn's Lab on fermentation. Rob Dunn is a Professor of Applied Ecology at North Carolina State University and is regarded as one of the leading scientists in the field of fermentation.

- https://robdunnlab.com/projects/wildsourdough/
- https://fermentology.pubpub.org/

3. If you have time, please read my recent publications attached to this email. They are not open access, **so please keep them for your personal use and don't share them with others!**

- The first one is just 3 pages and is a co-authored piece from my recent project on old yogurt practices with David Zilber (chef), Dr. Veronica Sinotte (evolutionary biologist), and myself. It is recently published a Canadian Food Journal.

Sinotte, V., Mutlu Sirakova, S. and Zilber, D. (2023) Culture Club. *Serviette Magazine*. [Online] Available at: https://serviettemag.com/

- The second article is titled "Forgotten Stories of Yogurt: Cultivating Multispecies Wisdom," published in the *Journal of Ethnobiology*, special issue on Philosophy, this year.

Mutlu Sirakova, S., 2023. Forgotten Stories of Yogurt: Cultivating Multispecies Wisdom. *Journal of Ethnobiology*, *43*(3), pp.250-261.

- The third and last one is my contribution to Oxford Food Symposium Proceedings for 2023. It is titled “Connected Food: Preserving Traditional Food Practices via Portable Foods."

Rationale

Fermentation practices, deeply rooted in history and diverse traditions, have birthed staples such as bread, cheese, and kimchi (Katz 2012; Dunn & Sanchez 2021). Today, a significant portion — one-third of global food consumption — can trace its lineage to these culinary heritages (Mintz 2011). However, with the rise of industrialised food production, we face an emerging threat: the proliferation of monocultures, evident in

agriculture and equally so at the microbial level in our foods (Nabhan, 2010; Flachs & Orkin 2021). This trend not only erodes our diverse food heritages but also jeopardises the skills and knowledge that sustain this diversity at microbial level (Barthel et al. 2013; Rest 2021). Beyond culinary traditions, there are deeper, more systemic concerns (Rozzi, 2013; Lorimer 2020). Recent microbiome research is raising warnings over a decline in human microbial diversity, closely tied to Westernised diets and lifestyles (Dominguez et al. 2018). This internal extinction is not an isolated concern; it mirrors a broader loss of biodiversity. Such losses carry grave implications for human health and wellness, drawing unsettling connections between diminished microbial diversity, the proliferation of 'modern diseases,' (Blaser 2014) and potentially heightened pandemic risks. Addressing these wicked challenges, fermentation emerges as a potent 'communicative space.' Its dual role in mitigating biodiversity loss and enhancing human well-being forms a nexus where science, culture, and art intersect through community engagement. In light of this, my proposed project, along with its associated activities, seeks to harness insights from traditional fermentation practices, setting the stage for inclusive dialogues centred on sustainable food futures. At the heart of this inquiry is the proposition that fermentation provokes transformations on various scales, from the microbial to the community level.

The exploration around fermentation has been a central theme in my academic research, emphasising the value of everyday fermentation practices in fostering sustainable pathways. In doing so I combine elements of human geography and environmental humanities, framed within the context of political ecology and microbiome research.

A culmination of my collaborations, academic pursuits, and publications led to the exhibition " Fermentation for Planetary Health" at the Deutsches Museum. This exhibition is an outcome of a project I initiated and was actualized together with two volunteer Ph.D. students, with a substantial outreach both on-site and online, propelled by my social media channels. The Munich Science Communication Lab (MSCL), in its quest for promoting pioneering innovative science communication methods highlighting the bond between human and planetary health, supported our project as a pilot science communication experiment. With the endorsement of MSCL, our exhibition aimed to stimulate profound conversations around fermentation's multifaceted contribution to planetary health, specifically its role in waste reduction, biocultural diversity preservation, and the promotion of just food systems.

Over the course of a year, we curated 18 illustrative posters and four short videos, which were showcased along with diverse fermented foods, each echoing a tale of cultural significance.

The main provocations that we use to structure our exhibition;

• 'From Waste to Taste': An exploration into fermentation as a pivotal food preservation technique throughout human history and its indispensable role in curbing food wastage.

• 'The Taste of Biocultural Diversity': Highlighting the importance of traditional fermentation practices amidst the biodiversity crisis.

• 'Fermenting a Revolution': Exploring fermentation’s transformative potential as an activist practice.

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