

Ting Lu

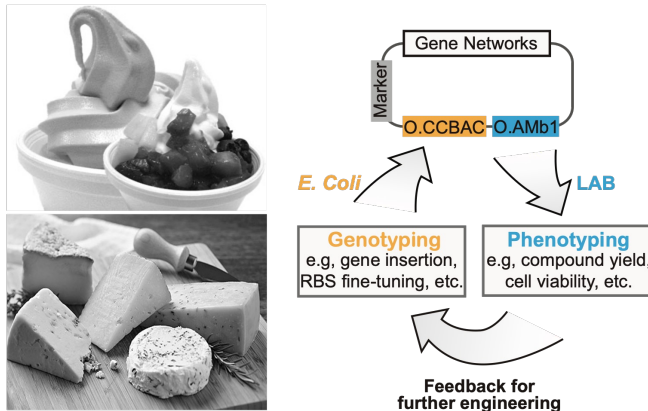
Professor

Department of Bioengineering
[Affiliate Research Page](#)

Email: luting@illinois.edu

Created: Apr 2024

Traditional practices of food production face a set of limitations including long harvest time and susceptibility to climate and disease. What if we can develop a new way of food production that is not subject to any of these limitations?



Research Interests

- Unconventional, microbial-based food production
- Design and engineering of microbial consortia for precision fermentation
- Engineering and applications of lactic acid bacteria
- Analysis of Kombucha tea microbiome
- Mathematical modeling of microbial metabolism

Current Projects

- Single-cell protein production from plastic waste
- On-demand food production from air, water and electricity
- Engineering of synthetic microbial communities for fermentation

Keywords

Synthetic biology, microbiomes, probiotics, metabolic engineering, mathematical modeling, on-demand food production

Interest Areas for Collaboration/Future Work

Dr. Lu is interested in working with food scientists and microbiome researchers to study food microbiome dynamics and function as well as the engineering of microbes for precision fermentation.