Breakthroughs in non-sterile fermentation of microalgae for renewable oil

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San Diego, California
Microalgae from Atlantic Canada
“Oily” microbes

Thraustochytrium

Schizochytrium
Fermentation

Sterile

Non-sterile
Algae growth
Controlled contamination

![Graph showing cell count and pH over time](image)
Robust microalgae

![Graph showing growth of MARA strain and Other strain over time](image)

- **X (g/L)**
- **Time (hrs)**

- **MARA strain**
- **Other strain**
Strategies

- pH
- Osmotic pressure – ↑ [organic carbon]
- Robust microalgae
- Clean and “strong” inoculums
Thank you