Enabling healthier, sustainable aquafeeds

KnipBio
Oceans of Today Can’t Provide for Our Tomorrow

- 3B+ dependent on oceans for protein
- Healthy Nutrition
- >80+% Fisheries at Capacity
KnipBio Snapshot

- Commercializing responsible single cell protein for aquafeeds
- Founded in 2013
- Located in the metro Boston area
- First commercial product ready late 2017
Timeline Overview

**Incorporation**
- May 2013
- 2 early IP filings

**MassChallenge “Gold”**

**Financing**
- $4.5M
- Built team; BOD
- Scale-up

**Commercialization**
- Feed manufacturers
- FDA submission

- **2013** July
- **2014** May
- **2015** Oct
- **2016** May
- **2017** Nov
- **2017** Mar
- **2017** Jul

**Events**
- **Proof of Concept**
- **Tech Dev & Transfer**
- **Market entry**

-KnipBio-
KnipBio’s Immuno-Nutrition Strategy

High-quality fishmeal replacement PLUS nutrients to improve health

Protein

Specialty molecules

KnipBio Meal (KBM)

Massive volumes, markets = commodity

Smaller volumes, specialty pricing
Demonstrating a Novel Protein to Capture Value

From “Feed to Fork” – Kampachi, a sashimi yellowtail

<table>
<thead>
<tr>
<th>Diet</th>
<th>Growth (g)</th>
<th>Survival</th>
<th>FCR</th>
</tr>
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<tbody>
<tr>
<td>Control</td>
<td>$709.79 \pm 146.05$</td>
<td>100</td>
<td>1.76</td>
</tr>
<tr>
<td>KnipBio (5%)</td>
<td>$739.43 \pm 110.42$</td>
<td>100</td>
<td>1.66</td>
</tr>
</tbody>
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>70 panelists could NOT detect a taste difference
The Challenges Ahead

De-risking a novel product
Integration into the supply chain
Regulatory
Technology efficacy & scale-up