Who are we?

The Yield Lab Institute is focused on driving more effective and impactful agrifood innovation to the market.

We believe that this can be done by attracting greater diversity of innovators to agrifood tech space, and by clearly communicating the needs of current stakeholders.

We can do this in a multitude of ways, from researching, advising, and consulting in specific ecosystems, to incentivizing and assisting entrepreneurship in specific sectors of agrifood technology.

At the Yield Lab Institute, we support innovation in agricultural and food systems by connecting and educating stakeholders (entrepreneurs, producers, distribution channel partners, agribusiness experts, investors, researchers, and eaters), globally.
Agrifoodtech Venture Capital is on the rise

**Upstream + Downstream**

**Annual Financings | 2012-2018**

Funding to agrifood tech startups grew 43% year-over-year to 2018, the same rate of growth between 2016 and 2017.

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>$2.6B</td>
</tr>
<tr>
<td>2013</td>
<td>$2.1B</td>
</tr>
<tr>
<td>2014</td>
<td>$5.4B</td>
</tr>
<tr>
<td>2015</td>
<td>$8.5B</td>
</tr>
<tr>
<td>2016</td>
<td>$8.2B</td>
</tr>
<tr>
<td>2017</td>
<td>$11.8B</td>
</tr>
<tr>
<td>2018</td>
<td>$16.9B</td>
</tr>
</tbody>
</table>

#ManureChallenge
<table>
<thead>
<tr>
<th>Impact Metrics</th>
<th>Companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crop Protection/Production</td>
<td>Plastomics, IMPETUS, Eiwa, RNAgrí, Agribility Technologies, Inc.</td>
</tr>
<tr>
<td>Animal Health/Nutrition</td>
<td>cryoocyte, ApisProtect, Nutrivert, MicroSynbiotix, Apteimmune, EIO</td>
</tr>
<tr>
<td>Precision Agriculture</td>
<td>AGERpoint, Sencrop, AGVOICE, kilimo, S^4</td>
</tr>
<tr>
<td>Renewables &amp; Sustainability</td>
<td>HOLGANIX, BayoTech, rootwave, LeanMedia, impact, agree, agrinio, REACH</td>
</tr>
<tr>
<td>Value Chain &amp; Logistics</td>
<td>NanoGuard, REACH, Foodshed.io, Cura, CoverCress Inc., Planetarians, Terviva</td>
</tr>
<tr>
<td>Food Ingredients</td>
<td>HEXAFLY, Arch Innotek Natural Nutrition, CoverCress Inc., Sustainable Ingredients</td>
</tr>
</tbody>
</table>
In 2015, U.S. Environmental Protection Agency partnered with pork and dairy producers, U.S. Department of Agriculture, World Wildlife Fund, and environmental and scientific experts to host The Nutrient Recycling Challenge -- a competition to find affordable technologies to recycle nutrients from livestock waste and create valuable products.

That competition attracted some very attractive early stage technology solutions, many of which have the potential to scale.

But, investment in manure management technologies remains low, and scaling, in many instances, remains dependent upon regulation & subsidies. Economic scalability is critical.
Manure Challenge

Organizing Advisors: World Wildlife Fund, Dairy Farmers of America & Newtrient
Sponsors: Cargill, The Maschoffs, WeWork FoodLabs
Advisors include: US EPA, AURI, Arrell Food Institute, Ultra Capital, Thrive Accelerator, Clean Energy Trust, Smithfield, Water Research Foundation, Tyson

The increasing global livestock population presents both an opportunity (nutrient upcycling) and, if not managed properly, a reputational and regulatory risk, for farming communities. If farmers properly manage the manure on their farms and fields, environmental risks can be significantly reduced and even turned into new business opportunities.

Several innovative manure management approaches are popping up around the world, but in order for these approaches to scale, the technologies and market development need acceleration.

#ManureChallenge
Challenge Process

✔ Solicit applications
✔ Select participants

❐ Selected companies receive voluntary mentorship in agribusiness AND finance
❐ 3 in-person programming sessions
  ❑ Sep 11 & 12, Kansas City, MO
  ❑ Nov 2019, Indianapolis, IN
  ❑ March 2020, San Francisco, CA
❐ Companies compete for cash prize during pitch competition in San Francisco, March 2020

#ManureChallenge
Challenge Outcomes

1. Stronger startups addressing high-impact areas in which innovation or adoption lags for some specific reason.

1. Published & publically available quantitative impact metrics methodology for manure tech investments.

#ManureChallenge
Get Involved

1. **Work with the Startups** - Reach out to learn more about the participating companies. Join us in Kansas City this Wednesday evening or Thursday morning to meet in person, or reach out to **Connie** for email introductions.

2. **Help build the Impact Metrics**: Contact **Connie** to get involved in our effort to build quantitative impact metrics methodology for manure tech investments.

3. **Sponsor** - contact **Connie** about opportunities

4. **Spread the word**: #ManureChallenge (@TheYieldLabInstitute)
Thank you

Connie Bowen
connie@theyieldlab.com

THE MANURE CHALLENGE
An expedited pathway to circular farm systems

#ManureChallenge