TechAccel
Technology Acceleration Partners

ADVANCING AGRICULTURE
AND ANIMAL HEALTH INNOVATIONS™

TechAccel brings private capital to invest in, acquire, and advance early-stage discoveries and technologies in plant and animal agriculture, animal health and nutrition, and related areas including food safety and quality and crop processing.

TechAccel makes early-stage investments in promising technologies for which a proof of concept has been demonstrated. TechAccel partners with inventors and the university to fund and execute focused translational research.

The goal of TechAccel Science Advancement Research is to reduce technical risk and move the technology closer to becoming a valuable product or service.

TechAccel partners with Agriculture and Animal Health Industry leaders to:

- Identify technology needs, gaps, transformative technologies, or adjacency opportunities.
- Identify or acquire the best available technology solutions.
- Co-fund science advancement research to mitigate risk with early-stage technology development.
- Transition technology to regulatory or launch pipeline after development benchmarks are achieved.

TechAccel also invests equity in early-stage companies. We have an "Equity-Plus" model: our equity investments are always accompanied by additional investments to develop the company's technology platform for adjacent markets.

TechAccel Partners with Universities in Four Ways

1. SUBJECT MATTER EXPERTISE

TechAccel contracts university faculty as consultants for investment due diligence activities and research scoping.

2. RESEARCH CAPABILITIES

TechAccel sponsors research at universities to advance and de-risk potfolio technologies.

3. INNOVATION

TechAccel seeks early-stage innovations and partners with the university to fund research and advance innovation toward commercialization.

4. EMERGING COMPANIES

TechAccel provides equity capital and support to university start-up companies that match our interest areas.

EXAMPLES OF TECHACCEL INVESTMENT AND SCIENCE ADVANCEMENT

These two examples provide insight to TechAccel's unique investment thesis. TechAccel values its university relationships to source new technologies and companies to invest in, and to conduct science advancement research and development. We have also executed master research agreements with select universities, which facilitate the execution of future research projects and relationships.

Epicrop Technologies Inc. (equity plus science advancement)

On March 7, 2017, TechAccel announced its equity investment in Epicrop Technologies Inc. (www.epicrop.com), an agriculture biotechnology company spun out of the University of Nebraska. The company has developed an epigenetic technology to improve crop yields and performance. Professor Sally Mackenzie invented the technology while at Nebraska; she is now at Penn State University.

TechAccel made an additional science advancement investment to apply Epicrop's technology to improve two additional crops. TechAccel has engaged faculty at several universities to conduct the research and development work. The larger field trial stage is expected to pique the interest and involvement of global strategic companies, which are the likely customers for the de-risked and developed technologies.

Professor Sally Mackenzie

Biopesticide Research (Joint Venture)

In 2017, TechAccel awarded the first investment in its "Path to Commercialization" program at the Donald Danforth Plant Science Center. The $60k investment sponsored a science advancement research project to demonstrate that a new class of genes could be superior targets for control of insect pests by RNA interference (or RNAi).

TechAccel worked with Danforth Center scientists and inventors Nigel Taylor, Ph.D., and Bala Venkata, Ph.D., to validate that their RNAi insecticide technology was effective against economically important Lepidoptera pests, which have historically been resistant to RNAi. The outcomes were positive: the project demonstrated about 1000x better efficacy against Lepidoptera than previously published reports and the technology was also effective against Coleopteran and Trombidiforme pests. TechAccel continues to invest resources to expand the technology, improve the patent application and advance product development.

TechAccel and the Danforth Center formed RNAissance Ag LLC, a company that holds the exclusive license to the RNAi technology. RNAissance Ag is focusing internal efforts on developing RNAi insecticide sprays while seeking opportunities to sub-license transgenic uses of the technology.

In 2019, RNAissance Ag was awarded a grant from the Wells Fargo Innovation Incubator (IN2) to further advance its technology. The company was one of just five in the program's first agtech cohort, co-sponsored by the National Renewable Energy Laboratory.

Nigel Taylor, Ph.D.

Bala Venkata, Ph.D.

TECHACCEL INVESTMENT INTEREST AREAS

Plant Agriculture

Crop improvement & associated technologies

- High-value niche crops including fruits, vegetables, tree-crops, and minor row crops: We are also interested in the major row crops including canola, corn, soy, wheat, etc.
- Novel non-GM breeding and trait technologies: Epicrop Techologies is an example of such a technology that we have invested in.
- Plant gene-editing targets and strategies to improve agronomic qualities (yield, disease, or stress resistance) or other consumer-oriented traits (improved nutrition, flavor, or other): Traits that only have model plant (such as Arabidopsis) data supporting them are less likely to interest us.
- We are generally NOT interested in genetically modified (GM) traits. But if you have a GM plant as a proof of concept, and have a strategy to recapitulate that trait via gene editing to produce a non-GM variety, we may be interested in exploring this with you.

Plant production technologies

- Biologicals including microbes and/or microbial extracts, peptides, RNA strategies, or bacteriophages, to improve plant performance or to control diseases and/or insects.
- Microbes or other strategies to improve soil health.
- Technologies to deliver and/or stabilize biologicals in the field or on the plant.
- Sensors, imaging and other engineering technologies that deliver clear, actionable information to a farmer in a cost-effective way.
- Analytic/diagnostic technologies that cost-effectively deliver actionable information to a farmer; ideally technologies that are rapid and are field deployable.

Post-harvest/post farm-gate technologies

- Technologies to manage and monitor ripeness.
- Technologies to reduce crop spoilage, improve storage life and maintain taste and nutrition quality.
- Novel grain or crop processing technologies and/or byproducts.
- Technologies to reduce/eliminate/or rapidly screen for disease organisms on harvested crops.

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Animal Health & Nutrition

Vaccine technologies

- Effective and novel vaccine designs targeting major animal diseases.
- Novel delivery platforms, especially oral, that can potentially be used for a variety of vaccines.
- Aquaculture vaccines, particularly orally available.
- Companion animal vaccines that address a large market with an unmet need.

Animal health biologics and technologies to reduce antibiotic use

- Immune stimulants, novel biologics such as peptides, antibodies or RNAs targeting major diseases.
- Novel methods for production or delivery of biologics. For instance, production of active antibodies in a plant or microorganism for use as a feed additive.
- Bacteriophages targeting animal disease pathogens for prophylactic use or treatment of clinical cases.

Animal nutrition

- Novel animal feed additives
- Effective fish-meal replacements for aquaculture
- Probiotics, microbes, microbial extracts to improve animal health, productivity, and well-being.

You may have an idea that does not exactly fit this list. We would like to hear about that also.

TechAccel looks forward to working with you!

Contact Us

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