Produce Tech Innovation Pitch
at the CFVGA Conference Feb 20, 2018

Request for Proposal

The Colorado Fruit and Vegetable Growers Association (CFVGA) invites you to present during an exciting closing session at our 4th annual conference in Denver. As the leading produce grower trade association in Colorado, CFVGA attracts close to 300 partipants at its annual conferences, including over 35 exhibitors and more than 40 of the most innovative grower businesses. This mix of professionals provides fertile ground for ag innovation start-ups to grow roots. Are you ready to take advantage of this opportunity to grow your business?

CFVGA is requesting proposals from qualified startup companies that are innovating ag tech solutions to meet the pressing demands and challenges of growers, shippers and fresh food processors. Consistent with the issues and current topics discussed later in this RFP, startups should be prepared to articulate the benefit of their solution at a general session in front of all attendees during the CFVGA Annual Conference on Tuesday, February 20 from 2:40 – 4:00pm in Denver, Colorado See http://cfvga.org for conference details.

CFVGA will select up to four companies to participate in the Produce Innovation Pitch.

The pitch will be moderated by James Pritchett, Executive Associate Dean for the College of Agricultural Sciences at Colorado State University (CSU) and assisted by Robert Sakata, President of CFVGA.

Companies will be subjectively evaluated by session panelists and the audience based on the three numbered items listed below. **Two awards** will be issued at the end of the workshop for a Panelists' Favorite and Audience Favorite. In the event these are the same company we will award a Pitch Favorite and a Runner Up. See Terms section for award details.

Proposals are due by **December 20, 2017.** Proposals should be prepared in accordance with the RFP and sent to admin@coloradoproduce.org.

Background

Based on a Value Chain of Colorado Agriculture study by Colorado State University, Northern Colorado is one of the top ag innovation areas in the US, with numerous ag patents issued in region framed by the cities of Denver, Boulder and Ft. Collins. CFVGA is the leading produce grower trade association in Colorado with over 250 members. CFVGA and Western Growers have an ongoing collaborative relationship. Western Growers Center for Innovation & Technology, located in the heart of Salinas, California, is the "go to" for produce tech innovations and solutions to the biggest challenges facing agriculture today. Currently, over 20 startups are in residency at the Center and each of them are working on their innovations that are designed to increase efficiencies and to benefit the business of agriculture. Residents enjoy networking with Western Growers members, collaborating with other startups at the Center and gaining opportunities, daily, to learn more-and-more about the issues growers, shippers and processors face.

Scope and Structure of Pitch at the conference

The presentation should:

1. Be no longer than 10 PowerPoint slides
2. Address:
    a. Leadership team (capabilities, experience, status of core)
    a. Solution/Product (Problem addressed, benefit to produce industry, reason to believe it delivers)
    b. Market Strategy (customers profitability model)
    c. Competitive Position (barriers to entry, competitors, needs)
3. Be no longer than 5 minutes

Following the presentation, a panel of judges will ask questions for clarification for up to 10 minutes.

Contents of Proposal

In no more than two pages of a .docx or .pdf file, please submit a proposal to CFVGA ED, Marilyn Drake, at admin@coloradoproduce.org 303-594-3827 (you will receive email confirmation of your submission) with the follow sections and content:

Name of business or product (under 10 words)

Business contact information

Stage of business development
Conceptual, service/product ready for market, growth into market, etc

Solution/Product (300 words or less)

- Who Benefits
- What is the produce-related problem/issue addressed?
- How does the product/solution address the issue?
- What steps have been taken to ensure the product/solution has utility?
- How scalable is the solution/product?
- What is the status of the solution/product?

Team (200 words or less)

Describe the experience, capabilities and expertise in the core leadership team?

Competitive Position (200 words or less)

Describe competitors, barriers to entry, solution economics

Appeal (100 words or less)

Describe why your technology should be featured during CFVGA Annual Conference

Slide Deck/Presentation

Submit your slide deck/presentation as an attachment as .ppt

NOTE: Do not submit any proprietary information. CFVGA does not intend to share your application beyond those parties who will make selections for the Annual Meeting, but we are not responsible for the inadvertent release of information provided in this application.

Estimated timeline

Deadline for Proposals:	Submit by December 20, 2017
Selection:	Notice provided by January 5, 2018
Presentation and Winner Selection:	Mandatory attendance February 20, 2018

Travel Conference Arrangements

If selected to participate in the Tech Pitch session at the 2018 CFVGA annual conference in Denver , Colorado, CFVGA will provide complimentary 2 day registration ($130 value), 2 nights lodging at the Renaissance Hotel Denver Stapleton (site of the conference), and an exhibitor booth for one individual from each selected company.

Terms

CFVGA shall not be responsible for any costs incurred by the firm in preparing, submitting or presenting its response to the RFP. The selection committee reserves the right to request additional information from respondents. CFVGA reserves the right to reject all submittals.

Each winner will receive a complimentary one-year membership with CFVGA and Western Growers, a customized arrangement for expanded exposure through a relationship with the Western Growers Center for Innovation and Technology http://www.wginnovation.com/ and we will write a story about their business in our CFVGA newsletter and emails.

In addition, as part of the prize pack Holland & Hart LLP has donated up to $3,000 in legal services to the Panelists' Favorite and $2,000 for the Audience Favorite. Holland & Hart is a leading law firm for start-up firms in the food and agribusiness space. Credit for legal services may be applied toward advising on topics such as regulatory compliance, raising capital, or information security. Provision of legal services will be subject to conflicts review.

All proposals are public records.

Categories of Produce Technology (non-exhaustive)

Biotechnology	Cybernetics	Digital Technology
Electronics	Emerging Technology	Energy Technology
Environmental Technology	Equipment	Food Technology
Geographical Technology	Information Technology	Machinery
Microtechnology	Nanotechnology	Radio Technology
Scientific Equipment	Telecommunications	Telematics
Tools	Transport	Vehicle Technology
Waste Treatment Technology	Alternative Technology	

Issues to Address

CFVGA is excited to review all proposals and has a specific interest in proposals addressing Labor and Food Safety.

Compliance Costs: Growers and handlers are beleaguered by market and regulatory requirements. Tracking the diverse requirements and specifications, ensuring control and compliance within the operation and then documenting or verifying adherence to regulations or market specifications are labor and document intensive process adding significant cost to an enterprise. CFVGA seeks solutions in this area. Ideally these solutions would be comprehensive or capable of integrating with other solutions to provide a complete compliance view. They should also be affordable and scalable to all size operations, provide real or just in time visibility to compliance status, flag areas of non-compliance and generate reports required by buyers and regulators.

Big Data: There is a wealth of public and private data that would be useful to agricultural companies if successfully harnessed (captured, stored, organized, aggregated, made accessible, curated etc.). Converting private data points that are commonly flat (paper) files to paperless (digital) information, automating the data collection process, storing data in the cloud and relating it to public data sources could provide information for operators to make real time and planning decisions with greater precision. Data privacy and use, use of proprietary and existing platforms, competitive issues as well as cost and system complexity all serve as barriers to the creation of a "big data environment". Solutions in this area will be affordable, scalable and comprehensive.

Labor availability: Labor is typically the single largest expense associated with the production of fresh produce. Skilled, legal, reliable labor is in short supply for many reasons. There is huge opportunity to mechanize many labor intensive operations in the fresh produce industry. Mechanization however is a complex undertaking. Solutions must ideally improve speed, precision, yield and quality (or at least not

sacrifice any of these key criteria) and be affordable. The fact that some commodities are more durable than others or the plant configurations make them more susceptible to mechanical harvesting point to the fact that a mechanization solution may require a multi-disciplinary approach for example engineering and breeding solutions.

Water Scarcity: Irrigated agriculture throughout the world is facing water shortages. Climate change and drought while top of mind today are merely immediate pressures for agriculture. Perhaps more important is the increasing competition among diverse water (environmental, municipal, industrial, recreational, etc.) users for the limited supplies available. The increasing competition coupled with the objectives of diverse users will limit the development of additional supplies (through storage, allocation) and force agriculture to continue to use less water. Solutions in this area will allow growers to increase output (yield) and quality while at the same time using less or alternative sources of water. Precision irrigation tools, treatment technology, varieties requiring less water are all tools that can aide in this objective. Ideal solutions will be affordable, scalable and allow growers to increase yield and quality with less or alternative sources of water.

Water Quality: Water quality is an issue on at least three fronts. 1) High quality water is necessary to produce safe and healthy crops 2) reduced water quality limits available supplies and 3) reduced quality water that leaves an agricultural operation may contaminate soil, groundwater or surface water. Agriculturalists seek solutions in this area that will allow growers to preserve or improve the quality of water received. These tools will assist with the quantitative analysis of water quality and incorporate tools, technology and processes that will ensure the quality of water received and discharged at/from a farm. Nutrients, salts, chemicals, pathogens, etc. are all potential problems on a farm or when discharged from a farm. Solutions should address one or more of these problems and facilitate measurement, monitoring and corrective actions. Ideally solutions would be structured so that they are of open architecture and would allow for a suite of potential contaminants to be addressed. Solutions should be affordable and scalable and ideally provide real time or rapid information rather than prolonged laboratory analysis.

Planning/Optimization: Many strategic functions within a fresh produce operation such as scheduling plantings and/or harvests, optimizing inputs, predicting yield and quality etc. can be improved within an operation resulting in greater net revenue through efficiencies, improved sales, etc. Technology in this area runs the gamut, from hardware (cameras, sensors, UAvs) that scouts orchards, groves, vineyards etc. to quantitatively measure or estimate crop need (inputs) or status (health, maturity, yield, quality) to software that makes key data points and analytics available such as real time crop needs and forecasting of planting and harvest schedules based on real time information from crop status and market demand. Ideally solutions would assist planners in decision making by making sensor, scouting and predictive information available through hardware and software. These platforms would utilize telematics and the cloud to make site specific information available to remote decision makers. They additionally would be scalable, affordable and capable of relating diverse data sets for comprehensive review. This need also relates to the “Big Data” need listed above.

Food Safety: In the food safety arena, growers, shippers and processors seek an acceptable (to customers and consumers) scalable and affordable technology that will eliminate the presence of human pathogens prior to shipment without compromising the nutritional or aesthetic quality of fresh produce delivered to customers. Absent an acceptable “kill step” the industry seeks technologies that can ensure prevention of

contamination; monitor operations for potential contamination, process or control failure; facilitate rapid testing, analysis and accurate results for pathogens in complex matrices (foods, water, etc.); provide real time information and record and communicate safety data up and down the supply chain. Food safety technologies may be integrated as a series of preventive hurdles each enhancing the protectiveness of a food safety system. Solutions should reduce the reliance on paper records, protect against human error and flag failures for immediate corrective action. Ideally, solutions should reduce the costs and enhance the preventive nature of food safety programs for all operators.