

# BIG IDEAS CHALLENGE

*Student New Venture Competition*

*April 13, 2021*



**MINNESOTA STATE UNIVERSITY, MANKATO**  
CENTER FOR INNOVATION & ENTREPRENEURSHIP



# BIG IDEAS CHALLENGE

## Welcome

Emcee: Mark Masters

## Finalist Presentations

Smart Bee Hives: General and Ag/Food/Beverage Finalist  
Hearing Glasses LLC: General and High Tech Finalist

## Lloyd Companies Video

## Finalist Presentations

Smart Kart: General & High Tech Finalist  
Tocco VR: General Finalist  
Downed Duck: General Finalist  
The FoodPack Group: Ag/Food/Beverage Finalist

## Remarks by Dr. Yvonne Cariveau

*Director of the Center for  
Innovation & Entrepreneurship*

## People's Choice Voting

**Remarks by Dr. Brenda Flannery,**  
*Dean of College of Business*

## Awards

Closing remarks by Dr. Yvonne Cariveau

**Tell Us How We Did!**

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## Big Ideas Challenge Finalists

Big Ideas Challenge applications are scored in a blind review by a panel of judges. The top scoring venture ideas compete for our 1st, 2nd and 3rd place prizes (\$5000, \$3000 and \$2000 respectively).

### **Smart Bee Hives**

*General and Ag/Food/Beverage Finalist*

### **Hearing Glasses LLC**

*General and High Tech Finalist*

### **Smart Kart**

*General and High Tech Finalist*

### **Tocco VR**

*General Finalist*

### **Downed Duck**

*General Finalist*

### **The FoodPack Group**

*Ag/Food/Beverage Finalist*

### **Agriculture/Food/Beverage Division**

As part of the University's "We Have Ag" efforts, we have created the Agriculture/Food/Beverage division to encourage and reward students with business ideas in this vital area. Judging of this division is separate from that of the general finalists and the winner receives a \$3000 prize. Thank you to our generous sponsor, All American Foods.



### **High Tech Division**

Thanks to the generosity of Daren and Sarah Cotter, we have a new High Tech Division prize of \$4000 this year. The top two High Tech ventures are competing for this prize. The High Tech Division was also supported by funding from Launch Minnesota Southwest, part of a statewide initiative to super-charge entrepreneurs across the state.



### Tocco VR

Our business idea is to create a Virtual reality (VR) experience that allows students access to specialized labs, testing equipment and interaction with complex system simulations. Other valuable content can also be accessed remotely, such as industry tours and professional engineering profiles. With a focus on engineering education, learning tracks can be customized to enable individual learning goals and styles. This flexible tool can enrich learning and offer a dynamic environment designed to engage students no matter their physical location.



*Jim Boyd, Engineering*

### Downed Duck

Our invention is a remote-controlled boat used for retrieving ducks off the water for hunters after they shoot them. It is used when the ducks you shoot land out in the middle of a body of water that you otherwise could not retrieve. Right now we have two boats that we made ourselves. The invention is patent pending. Our next step is mass manufacturing and we are excited to find connections in that area.



*Jaden Klingenberg, Psychology*

## People's Choice Voting

**Vote for your favorite presentation.  
The team with the most votes wins \$2000!**



### Smart Bee Hives

Our business idea is to design a Internet of Things (IoT) based solution to monitor the health of bees in an apiary. The device will include sensors that record temperature, humidity, weight, and frequencies in the beehives. Bee farmers can receive real-time

data that will allow them to immediately deal with any circumstance demanded by their apiaries' conditions. We will use an radio-frequency identification (RFID) to tag a queen bee and monitor them separately. This is why we emphasized the importance of monitoring them separately. This project will benefit hobbyists and bee farmers.



### SMART BEEHIVE

Making Beekeeping Easier 

*Sumit Mahajan, Manufacturing Engineering*  
*Abdelrahman Elkhatib, Electrical Engineering*

### The FoodPack Group

The Foodpack Group is an association for organizations that operate backpack food programs. We are a mission-driven organization that uses the power of group purchasing to offer a more cost-effective and efficient solution to our member organizations allowing them to reduce their expenses and serve more kids. Backpack food programs are often operated by non-profit organizations that may already be resource-strapped and operating lean. Our organization will operate as both a purchasing co-op and central coordinator for these organizations.

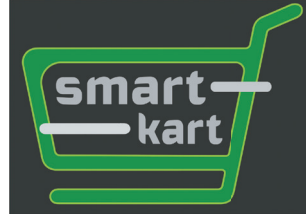


*Patti Radford, Applied Leadership*



### Smart Kart

Our invention is a Smart Kart which is an electronic shopping cart to provide customers assistance while shopping and reducing lines at checkout. It saves time of customers by guiding them to where the product is located in a store and provides information and reviews about the product. More convenient checkout options as customers can scan the barcode on the cart itself and pay through the app or swipe the card in the card reader space on the Smart Kart.



*Abi Saha, Accounting & Business Management*

### Hearing Glasses LLC

Our business idea is to create glasses designed for people with hearing disabilities. Hearing Glasses (HG) will have the ability to hear someone speaking and display as text on the lenses. Imagine giving those who are hearing-impaired the ability to be more involved in social activities. Those individuals with our glasses will have the capacity to talk to everyone, not just those who know sign language. Fifty percent of hearing-impaired people do not know how to use their voice to communicate or are not comfortable doing so. This is due to not knowing how to regulate the volume, pitch, or sound of their voices in a way that most people can understand. We are creating an interactive app to help them learn how to use their voice to communicate more confidently.



*Abdelrahman Elkenawy, Electrical Engineering*  
*Kaitlyn Gloege, Management Information Systems*  
*Alex Shepherd, Computer Information Technology*



### **Craig & Pat Lloyd**

#### *Lloyd Companies*

After meeting and graduating from Mankato State University, Craig and Pat Lloyd got married and began their journey as entrepreneurs. It was back in 1972 when they moved to Sioux Falls, S.D to manage apartments for Craig's uncle, Bob Lloyd.

Craig and Pat did it all in order to make ends meet for their growing family. Over the years, their team grew, their dreams evolved and Lloyd Companies became a full service construction, development and real estate company. Craig and Pat's humble beginnings, small town hospitality and family values kept them focused, where quality, integrity and relationships matter and most importantly where people are the foundation.

Although Craig and Pat no longer serve in the day to day operations of the company, they both serve on the company Board of Directors. It is not always easy for Craig to completely pull away from the work that he loves, but the two of them are enjoying the much deserved time traveling with good friends, family and most of all, their grandchildren.



### **Tyler Snitker**

#### *All American Foods Inc.*

Tyler is the Lead Scientist at All American Foods Inc. where he helps to oversee the R&D Department and drive development of novel, innovative food ingredient solutions. His team is focused on working collaboratively with customers to develop customized ingredient solutions to meet their unique needs; as well as develop new ingredient solutions to meet industry trends and challenges. Tyler's professional career began after graduating from Wartburg College, IA with a B.A. in Biochemistry. Throughout his career in the sciences Tyler has had opportunities to work on an array projects ranging from the production of DNA and RNA oligonucleotides, fisheries management, enzyme application development, and developing unique food ingredient solutions. These experiences have given Tyler a passion for new product development which helps accomplish his goal of learning every day. One of the most satisfying aspects of his career is seeing various products in the marketplace that he has had a hand in creating.





## Big Ideas Challenge Judges

### Sarah Richards

#### *Jones Metal*

Sarah was born and raised in Mankato, and from an early age wanted to be the first female quarterback for the Minnesota Vikings. Instead, she became a PGA Pro and worked in the Twin Cities and Florida as a golf professional for nearly 30 years.



Since returning to Mankato in 2008, Sarah has been involved in many Mankato-area philanthropic organizations and volunteer activities, including the Mankato YWCA Board and Executive Committee, Greater Mankato Growth Council, Minnesota State Mankato Big Ideas Challenge, Children's Museum of Southern Minnesota, and Dream Big Planning Committee for the Southern Minnesota Initiative Foundation. The YWCA played a significant role in jump-starting Sarah's community involvement when, the year she returned, Anne Ganey, former YWCA Executive Director, asked Sarah to join the board.

A common thread that links her local volunteer work to her professional career is the idea of "leadership from legacy."

When Sarah returned to Mankato to join the family business, Jones Metal Inc., she aspired to promote her grandfather's legacy of entrepreneurship and her great-grandmother's legacy of non-traditional roles for women in the community.

This drives her work at Jones Metal, where she is president and CEO and a third-generation owner along with her brother and sister. One of her co-workers' observes, "Working with Sarah is demanding, fulfilling and fun at the same time, as Sarah constantly strives for excellence in the management team and the entire company. She is an outstanding boss, leader, and friend."



### **Bron Scherer**

#### *CEO/CFO – Protein Sources*

Protein Sources is a diversified swine management and feed manufacturing company in Mapleton, Minnesota. Bron currently provides financial consulting, advisory, project management and CFO services for companies principally in southern Minnesota and the Twin Cities. Bron began his professional career with Arthur Andersen & Co, Minneapolis upon graduation from Minnesota State University, Mankato with a Bachelor of Science Degree in Accounting. He left the Firm in 1987 as an accounting and audit manager and has been self-employed since. Bron is active in the community, having served on several non-profit and church boards and committees. He is currently a member of the City of Northfield Finance Committee, Board Member (since 2014) of the Northfield Area Fire and Rescue Service (Chair in 2019), Trustee of the Northfield Fire Department Relief (Pension) Association and has been Republican Party of Minnesota Treasurer and an Executive Committee Member since 2012. In 2014, he was appointed to the Minnesota State Mankato College of Business Advisory Council. Scherer is the recipient of the 2015 Minnesota State Athletics Philanthropic Award and was inducted into the Minnesota State Mankato Athletics Hall of Fame in October 2015. He also serves on the National Pork Producers Competitive Markets and Pork Industry Risk Management Committees.



## **Christine Lantinen**

### *President/Owner Maud Borup Inc.*

In 2005, Christine purchased Maud Borup and transformed the company from a business-to-consumer model to a leading wholesale candy, confections, and food gift company, selling direct to specialty and mass retailers such as Target and Whole Foods. This year the company produced 8 million items and brought 150 products to market. It is now one of the top five candy companies in Minnesota.



The company vision has remained constant; provide a high level of customer service to the retailers and wholesalers it serves through custom product design and development, a lean supply chain, and green manufacturing practices. In 2015 a 100 ft wind turbine was installed to power its LeCenter manufacturing facility, which is one of thirty things it does as a company to reduce and reuse waste.

Maud Borup takes pride in packing its gifts in the US and sourcing most of its food components in the US. Headquartered in Plymouth, MN, with its manufacturing facility in Christine's hometown of Le Center, MN, the company continues to expand in-house manufacturing, production, and warehousing. Maud is Global Food Safety Initiative (GFSI) certified and certified to produce and pack Gluten Free and Organic products.

Christine was recognized by the Small Business Administration as Minnesota's 2019 Small Businessperson of the Year. She is a 2019 BBB Torch Award for Ethics finalist and made the 2019 Fast 50 Companies list by Minneapolis/St Paul Business Journal. She is committed to having a healthy balance between running a family owned business and being a wife and mother. She hopes one day her kids will continue the Maud Borup tradition.



# Thank You Sponsors

The College of Business would like to extend their gratitude to those who have given financial support throughout the year for the Big Ideas Challenge.

## Primary Sponsor

Craig & Pat Lloyd, '72 Alumnus,  
Founder of Lloyd Companies



## Additional Sponsors

BankVista

Jones Metal

MN Valley Business Magazine



## High-Tech Sponsor

Daren & Sarah Cotter



## Agriculture / Food and Beverage Sponsor

All American Foods



## Thank You First Round Big Ideas Challenge Judges

First round judges blind review all submissions and their scores determine the finalists.

Channing Pick

Shane Bowyer

Mark Armbrust

Kayla Rossiter

Kenneth Diamond

John Ruprecht

Hannah Bretz

Derek Liebertz



# Thank You Mentors and Area Businesses

Mentors meet with and assist the finalists with their business plans and pitches.

## Mentors

Matthew Lessard, *AllTech*

Jeremy Geske, *Minnesota State Mankato*

Mark Bietz, *Fun.com*

Benya Kraus, *Lead 4 America*

Chad Wolf, *Mass Flow Sourcing*

Pam Bishop, *Southern MN Initiative Foundation*

Tony Friesen, *2 Pins Bakery*

Jay Adams, *CrankyApe*

## Special Recognition

The following members of the College of Business Entrepreneurship and Innovation team have provided tremendous vision, leadership and support in the development and growth of the Big Ideas Challenge.

Dr. Yvonne Cariveau, *Director of the Center for Innovation and Entrepreneurship*

Emmanuel Adeyemi, *Entrepreneurship and Innovation Graduate Fellow*

Saumya Gautam, *Undergraduate Student Assistant*

Dr. Brenda Flannery, *Dean, College of Business*

Dr. Shane Bowyer, *Associate Professor of Management*

Dr. Kathy Dale, *Management Department Chairperson*

COB Student Marketing Team





**MINNESOTA STATE UNIVERSITY, MANKATO**

**COLLEGE OF BUSINESS**

## Vision

To be the clear business school choice for those who want to engage in real-world learning experiences.

In the College of Business, we dream of providing all of our students and faculty with many kinds of experiences that empower them to develop big ideas and real-world solutions. We aim to provide big experiences to all business students: life-changing classes taught by exceptional faculty, real-world projects in partnership with business, technology access and applications, off-campus opportunities such as internships and study abroad, as well as on-campus activities, events and networking connections. We want students to do important work, meet people, go places and think of themselves in ways they never before thought possible.

The College of Business is so appreciative of all our partners – a committed community of faculty and staff, students and alumni, as well as businesses and benefactors. Thank you all for making a difference to our students, our college and our world.

## College of Business Entrepreneurial Initiatives

- Innovation and Entrepreneurship Minor
- United Prairie Bank Integrated Business Experience
- Agribusiness Minor, Ag Today Club and Henze Ag Leadership Series
- Richard & Mary Schmitz Endowment Food Entrepreneurship Lecture
- Entrepreneurship/EnactUS Club
- Center for Innovation and Entrepreneurship
  - Big Ideas Challenge
  - Global Entrepreneurship Week
  - Entrepreneurs of Color Celebration
  - Women in Business Leadership Series





**MINNESOTA STATE UNIVERSITY, MANKATO**

**CENTER FOR INNOVATION & ENTREPRENEURSHIP**

## **Center for Innovation and Entrepreneurship**

All students and community members are welcome!

*Launching the next generation of entrepreneurs, innovators  
and dynamic organizations.*

### The CIE is for:

- student entrepreneurs wanting help to develop your business ideas
- students wanting real world projects for classes or as a bridge to an internship or job
- businesses wanting to develop innovative solutions to business challenges
- faculty members looking for projects to enhance research or teaching

### Focuses of the CIE:

- Big Ideas Challenge business competition and support for student participation in other competitions
- Nurturing and expanding student entrepreneurship organizations
- Enhancing both academic and continuing innovation and entrepreneurship education
- Global Entrepreneurship Week, 1 Million Cups Mankato, Social Media Breakfast Mankato, Entrepreneurs of Color Celebration, Women in Entrepreneurship and other student-community events.

### *Cultivating Innovation, Accelerating Entrepreneurship*

### For more info:

cie@mnsu.edu or 507-389-1018 Director: Yvonne Cariveau, PhD





# MINNESOTA STATE UNIVERSITY, MANKATO

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### MINNESOTA STATE

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