

## CASE STUDY

# Landing a Series A Investment Round

Cal Poly CIE Small Business Development Center Stewards Mazen Animal Health Towards a \$12 Million Round of Funding

Mazen Animal Health is a new company focused on developing, delivering and commercializing novel biological vaccines and therapeutics that disrupt the status quo and address complex or unsolved challenges in animal health and protein production. Their first disruptive solution is a reinvention of vaccines with a novel technology platform that will shift the paradigm in disease prevention.

## ABOUT MAZEN ANIMAL HEALTH

### TRANSFORMING MAIZE INTO THE FUTURE OF VACCINES

The inspiration behind Mazen's company name is their novel platform that uses maize as a biofactory for the production of recombinant vaccines. This unique approach enables oral delivery of vaccines in an edible form with distinct advantages over today's injectables, topicals and water-based orals. Their cross-species platform has the

flexibility to be used in swine, poultry, livestock, aquaculture, pets and wildlife, and has the potential for vaccine solutions for a wide variety of diseases. It has the potential to expand the \$12 billion global vaccine market while dramatically reducing losses.



JENNY FILBEY, CEO



#### Flagship Product

Developing, delivering and commercializing novel biological vaccines

#### Website

[mazenanimalhealth.com](http://mazenanimalhealth.com)

#### Founders

Jenny Filbey



## THE CHALLENGE

Mazen Animal Health has an emerging vaccine based technology. The technology is a game changer in animal health, as you can feed vaccines to animals instead of injecting them. A large farming operation could improve efficiencies, decrease losses from disease, use less antibiotics, improve the safety of workers and animals with room temperature stable vaccines dosed in feed.

The technology platform leverages many years of breakthrough research and development led by John Howard, Mazen Co-founder and world-leading expert in recombinant protein production in plants. Howard has been a guest lecturer at Cal Poly for nearly two decades and developed the technology on campus in the Cal Poly Tech Park with the support of dozens of faculty members and students.

As it became evident that Mazen was transforming into an early stage startup that could disrupt an industry, Co-Founders John Howard, PhD. and Jenny Filbey, PhD. turned to the Cal Poly CIE Small Business Development Center for guidance on capital investment and development of a board of directors with deep experience in animal health.

“We needed a partner to help steward our efforts building a board of directors with relevant experience and business acumen. Like many start-ups, we need to pull on our partners and allies in doing so. The Cal Poly CIE Small Business Development Center was crucial in this effort.”

- Jenny Filbey,  
Co-Founder and CEO



## THE SOLUTION

The Mazen Animal Health leadership met with Judy Mahan, Director of the Cal Poly CIE Small Business Development Center. Together they outlined a plan of attack including coaching, mentoring, pitch feedback and introductions to key investors.



## RESULTS

The initial guidance received from the Cal Poly CIE Small Business Development Center in 2016 positioned Mazen Animal Health to be able to advance their technology and ultimately raise \$12 million in a Series A round. The company is now positioned to expand the \$12 billion global vaccine market and dramatically change vaccine delivery for swine, poultry, livestock, aquaculture, pets and wildlife.

- ✔ Initial Angel Round - \$1.3 Million
- ✔ Series Seed - \$2 Million
- ✔ Series A - \$12 M

“Over the years, Judy Mahan and others at the SBDC have provided tremendous support and encouragement to me as the CEO of Mazen. Not only have they provided helpful mentoring and coaching, but also leads to investors which has led to investments in Mazen by several California-based groups.”

- Jenny Filbey,  
Co- Founder and CEO



# HELPING SMALL BUSINESS OWNERS THRIVE IN SAN LUIS OBISPO COUNTY

The Small Business Development Center (SBDC) promotes the development of technology-focused ventures by providing high-quality business assistance to start-ups and established companies. Our team of 35+ business consultants helps entrepreneurs launch companies, create and retain jobs, and attract capital investment. All services are complimentary to SBDC clients.

## COMPLIMENTARY BUSINESS CONSULTING SERVICES:



**ONE ON ONE CONSULTING**



**OPEN OFFICE HOURS**



**WORKSHOPS & WEBINARS**

## AREAS OF EXPERTISE:

Access to Capital  
Accounting  
Basic Operations  
Business Planning

Engineering  
Finance  
Grants  
Human Resources  
Legal

Marketing  
Manufacturing  
Market Research  
Pitch Preparation

Product Development  
Sales  
Strategic Planning  
Software Development  
Supply Chain

## BECOME A CLIENT TODAY: VISIT [BIT.LY/CIESBDCSIGNUP](https://bit.ly/ciesbdcsignup)

Enter in your company information and submit your request. Staff will reach out via email to schedule an initial phone call.

✉ SLOSBDG@GMAIL.COM  
☎ 805-756-5171  
🌐 SBDC.CALPOLY.EDU  
📍 872 HIGUERA ST, SUITE 307  
SAN LUIS OIBPO, CA 93405



Funded in part through a Grant with the Governor's Office of Business and Economic Development. All opinions, conclusions, and/or recommendations expressed herein are those of the author(s) and do not necessarily reflect the views of the Governor's Office of Business and Economic Development.



Funded in part through a Cooperative Agreement with the U.S. Small Business Administration.

