

# Matrix Sciences Overview of Services



# History & Background

# STRATEGIC ACQUISITIONS TO DATE



# NINETEEN LOCATIONS AND GROWING

## United States

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### CALIFORNIA

Los Angeles

### DELAWARE

Milford

### ILLINOIS

Chicago

Mount Prospect

### INDIANA

Merrillville

### MASSACHUSETTS

Canton

### MICHIGAN

Battle Creek

Detroit

Clinton Township

### OHIO

Columbus

### OREGON

Umatilla

Portland

### PENNSYLVANIA

Philadelphia

### SOUTH DAKOTA

Brookings

### WASHINGTON

Othello

Pasco

### WISCONSIN

Green Bay



## Canada

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### ONTARIO

Toronto

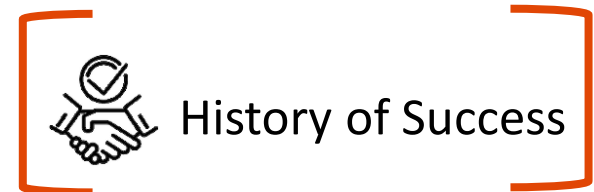
# COMMON DENOMINATORS OF BUSINESS UNITS



Businesses were owned and managed by scientists with a focus on solving problems.



Their clients felt a difference doing business with them.



All have a successful business track record of 10 plus years in their respective businesses.

# Our Services for CEA

## MICROBIOLOGICAL TESTING FOR CEA

- Human Pathogen Testing Using Immunoassay and Molecular Methods
  - Environmental Monitoring
  - Periodic Product Testing
  - Seed, soil and soil-less media testing is on the rise
- Indicator Organism and Enumeration Testing
- Microbial Confirmations and Identifications
- Online Access and Analytics of Data



SERVICE

## ANALYTICAL CHEMISTRY FOR CEA

- Nutrition Labeling
- Contaminant Monitoring
  - Heavy Metals
  - Pesticides
- Claim Verification
  - Specific nutritional claims – vitamins, minerals
  - Pesticide-free claims
- Agricultural Testing





SERVICE

## RESEARCH STUDIES FOR CEA

- Process Validation Studies
  - Treatment of seeds



## CONSUMER AND SENSORY RESEARCH FOR CEA

- Consumer Testing, Small and Large Scale
  - Central Location Testing (CLTs)
  - Home Usage Testing (HUTs)
  - Qualitative Research
- Sensory Research
  - Descriptive Analysis
  - Discrimination/Difference Testing
- Product Shelf-Life Testing
- Sensory Counseling
- Sensory Training and In-Plant Sensory Programs
- New product (variety) selection
- Existing product consistency lot to lot
- Comparison to competing products



## ENTERPRISE RISK MANAGEMENT SOLUTIONS FOR CEA

Range of services and experts in the areas of:

- Food Safety, Quality, Defense and Fraud
- Environmental Monitoring, Testing and Sampling
- Data Analytics
- Regulatory and Legal
- Product Development
- Risk Management
  - Anytime food is grown, made or processed for human consumption, there is an associated risk
- Recall and Incident Management
- Sustainability
- Food Processing
- Packaging and Labeling
- X-ray Inspection Services



SERVICE

## AGSCIENCES SERVICES FOR CEA

- Source Water Analysis
- Nutrient Solutions Analysis
- Soil-less Media Analysis
- Plant Tissue Analysis

Pesticides | Herbicides | Fungicides

Even though they are not used in the CEA sector, more and more retailers are asking for verification testing

- Wide range of commodities in the marketplace validated
  - Legally Defensive LOQ's
  - Specialized laboratory facilities
  - Screening of latest compounds

## SCIENCES REVIEW FOR CEA

- Source Water Analysis
  - Suitability & baseline levels
- Nutrient Solution Analysis
  - Monitor formulations
- Soil-less Media Analysis
  - Evaluate nutrient levels
- Plant Tissue Analysis
  - Monitor plant growth performance
- Microbiology
  - Monitor water, environment, & products
- Pesticide Analysis
  - Support label claims
- Consumer/Sensory Research
  - Identify consumer preference for specific varieties that can now be offered by CEA
  - Support new product launches
- Risk Management
  - EMP development
  - FDA & USDA regulatory compliance solutions
  - Food safety & quality risk assessments
  - Supplier risk assessments & audits
  - Process validations
  - Product Testing program design & modeling
  - Recall/Incident Management & Response
- Member CEA Food Safety Coalition
  - Standards Working Group
- Member United Fresh

Thank you for your time.  
Questions?

**BECAUSE  
CONFIDENCE  
MATTERS**  
| Expertise  
| Integrity  
| Communication

**Matrix**  
SCIENCES