

# **Sprout Safety Training Workshop**

## **IFSH Sprout Safety Task Force**

**ISGA Annual Convention**

**Oct 17-20, 2011**

# IFSH – At a Glance

## Snapshot

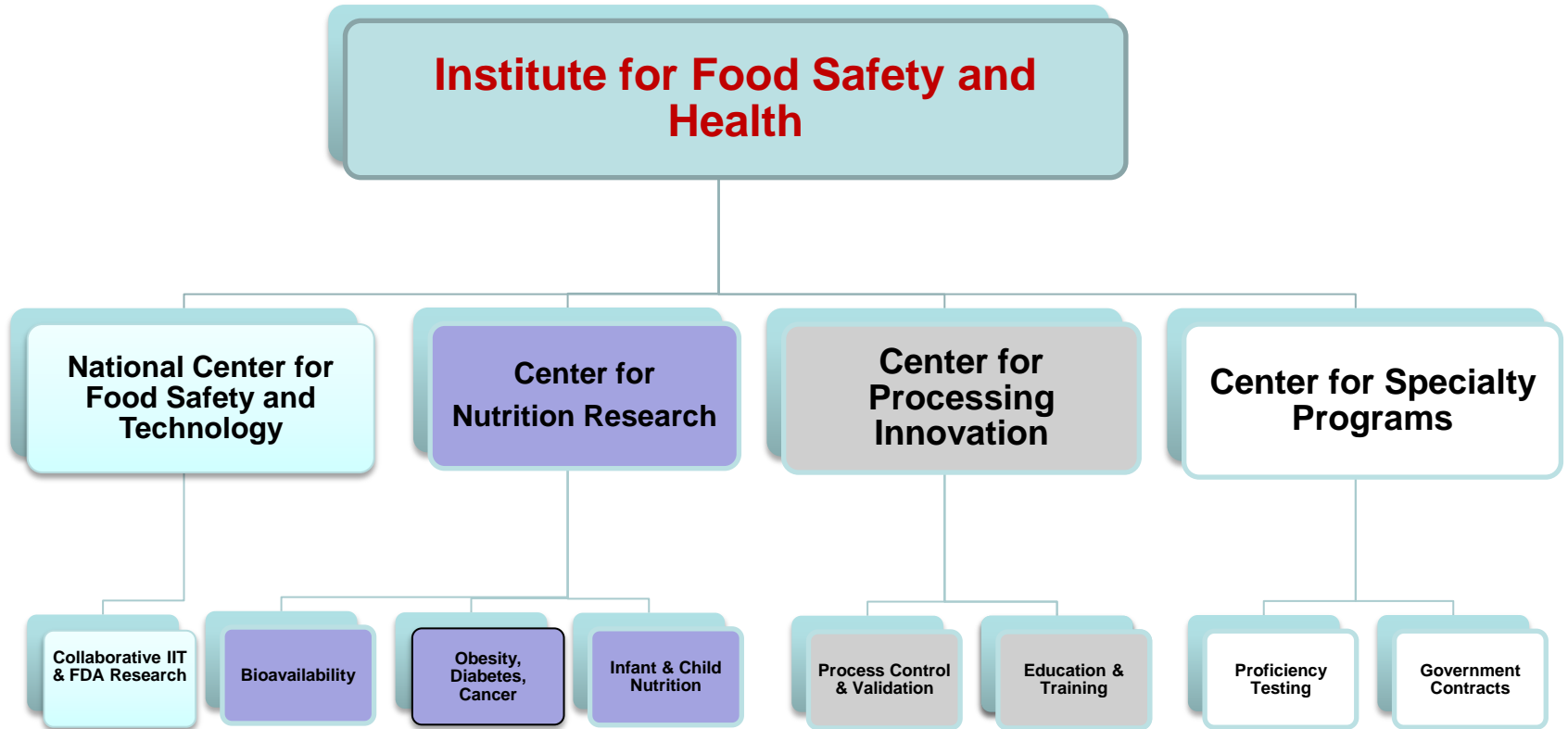
- Established as NCFST in 1988 and advanced to IFSH in 2011
- **Consortium between IIT/FDA/Industry**
- **Location for FDA's Division of Food Processing Science & Technology**
- Primary focus
  - food processing safety
  - nutrition research
  - national security related to food
- Masters and Professional Certificates in FST and FPE

## People

- 95 - 45 IIT and 50 FDA
- 129 Graduate Students



# IFSH Centers



# IFSH & Government

- FDA Division of Food Processing Science & Technology - physically located within IFSH
- Cooperative grant allows for collaborative research program
- Ability to evaluate new technologies for improving public health aspects of food
- Collaborative research program to ensure policy and new regulations based on sound science
- USDA MOU

# Emergence of Food Safety Issues

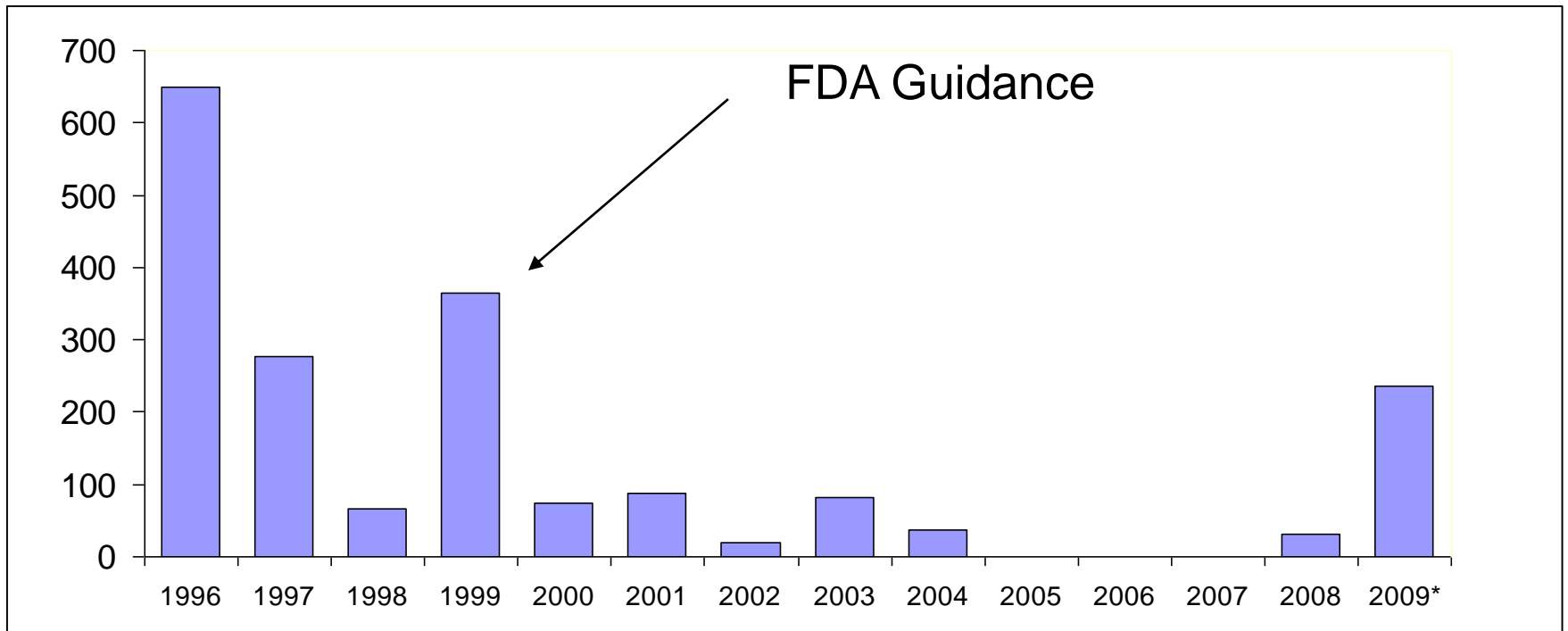
- Sprout seeds- raw agricultural product
- Rapid microbial growth during sprouting
- Consumption of product raw
- Broad distribution systems



## Isolation of pathogens from outbreak associated sprouts/seeds

Pathogen	Year	Location	Type of Sprout	No. of Cases	Isolated from Sprouts/Seeds
<i>E. coli</i> O104:H4	2011	Germany		3332	Yes/?
<i>E. coli</i> O157:NM	1998	CA	Alfalfa/Clover	8	Yes/No
<i>S. Bovismorbificans</i>	1994	Sweden, Finland	Alfalfa	595	Yes/No
<i>S. Enteritidis</i>	2000	CA	Mung	45	No/No
<i>S. Gold-Coast</i>	1989	U.K.	Cress	31	Yes/No
<i>S. Havana</i>	1998	CA, AZ	Alfalfa	18	No/Yes
<i>S. Havana/Cubana/Tenn.</i>	1998	CA	Alfalfa	34	Yes/Yes
<i>S. Mbandaka</i>	1999	OR, CA, ID, WA	Alfalfa	~ 68	Yes/Yes
<i>S. Montevideo/Meleagridis</i>	1996	CA	Alfalfa	>500	Yes/No
<i>S. Newport</i>	1995	Denmark	Alfalfa	154	Yes/Yes
<i>S. Newport</i>	1995-96	OR, Canada, Denmark	Alfalfa	133	Yes/Yes
<i>S. Saint-Paul</i>	1988	U.K.	Mung	143	Yes/Yes
<i>S. Senftenberg</i>	1997-98	CA	Alfalfa/Clover	52	Yes/No
<i>S. Stanley</i>	1995	US, Canada, Finland	Alfalfa	>272	No/No

# Cases of foodborne illness attributed to sprouts in the US



*Katherine Vierk, CFSAN*

# IFSH Sprout Safety Task Force

- **Objectives:**
  - Update & build clarity on 1999 FDA guidelines on sprout safety
  - Increase industry compliance
  - Facilitate necessary research for updating FDA guidelines
  
- **Formed in October 2009**



# Members of Sprout Safety Task Force

- **IFSH/IIT:**
  - Alvin Lee, Ph.D.
  - Armand Paradis
  - Jason Wan, Ph.D.
- **FDA:**
  - Tong-Jen Fu, Ph.D.
  - Mary Lou Tortorello, Ph.D.
  - Rich McDonald, Ph.D.
  - Michelle Smith, Ph.D.
- **Brassica Protection Products:**
  - Earl Hauserman
  - Antony Talalay
  - Paul Battaglia
- **Caudill Seed:**
  - Dan Caudill
  - Steve Benjamin
- **Jonathan Sprouts:**
  - Barbara Sanderson
  - Rich Wolfe
- **ISGA:**
  - Bob Sanderson
  - Michael Lalley
  - Bob Rust
  - Kelly Warren

# **Sprout Safety Task Force Milestones Achieved**

- **Developed an audit checklist to guide sprout growers in following best practices in their operations**
- **Draft audit checklist reviewed by an Expert Review Panel & sprouter's**
- **Test-run of audit checklist conducted**

# Audit Checklist Sub-Team

## **FDA:**

Tong-Jen Fu (Co-Chair)

Michelle Smith

## **ISS:**

Kelly Warren

## **Brassica Protection Products:**

Earl Hauserman

Paul Battaglia

## **Jonathan Sprouts:**

Barbara Sanderson (Chair)

## **Caudill Sprouting**

Stephen Benjamin

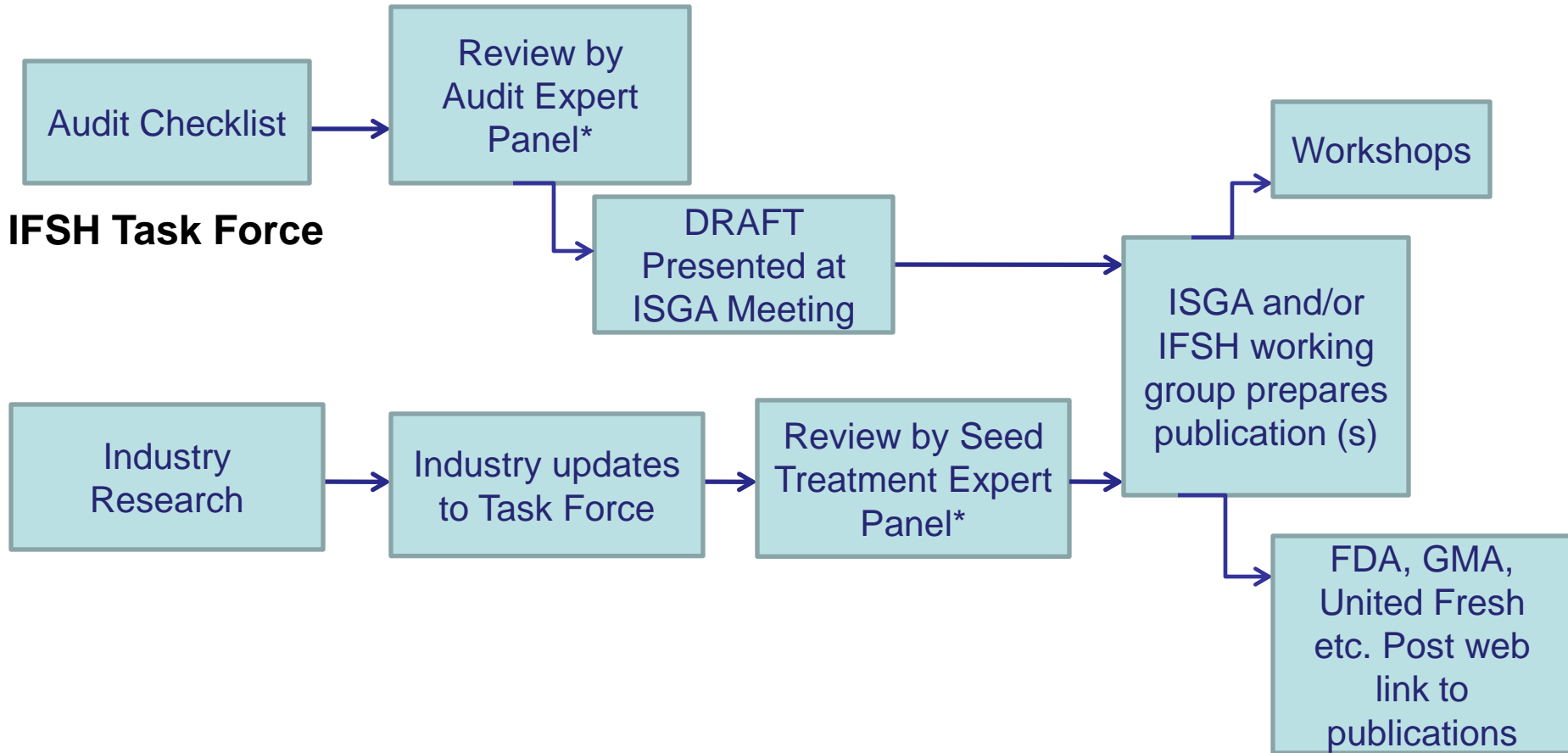
# Sprout Audit Review Panel

Name	Affiliation	Comments
Larry Beuchat	U. Georgia	Academic
Tong-Jen Fu	IFSH/FDA	Government, Task Force Co-chair
Dave Gombas	United Fresh Produce Association	Industry
Kent Kilbrew	Ahold USA, Inc.	Industry
Armand Paradis	IFSH/IIT	Academic, Task Force Co-chair
Kathleen Rajkowski	USDA/ERRC	Government
Tom Ross	U. Tasmania	Academic
Mansour Samadpour	IEH, Inc.	Industry
Barbara Sanderson	Jonathan Sprouts, Inc.	Industry, Task Force Chair
Don Schaffner	Rutgers U.	Academic
Bengt Schumacher	OMAFRA, Canada	Government
Michelle Smith	FDA	Government
Anthony Solarni	Sysco	Industry
Dick Spezzano	Former Vons, Safeway	Industry
Bob Strong	Steritech	Industry
Mary Lou Tortorello	IFSH/FDA	Government
Keith Warriner	U. Guelph	Academic
Dick Whitting	Exponent	Industry

# Future Actions & Milestones

- **Communication plan- sprout workshop & other channels**
- **Research areas to be considered:**
  - **seed treatments**
  - **evaluation of testing methods, and**
  - **risk assessment approaches to sprout safety**

# Framework IFSH sponsored Expert Panel Reviews



# Acknowledgements

- ISGA
- Audit Checklist Sub-team and reviewers
- Sprout growers, seed suppliers and allied industries
- Workshop participants