



ASTA Annual Meeting

April 29, 2014



ILSI

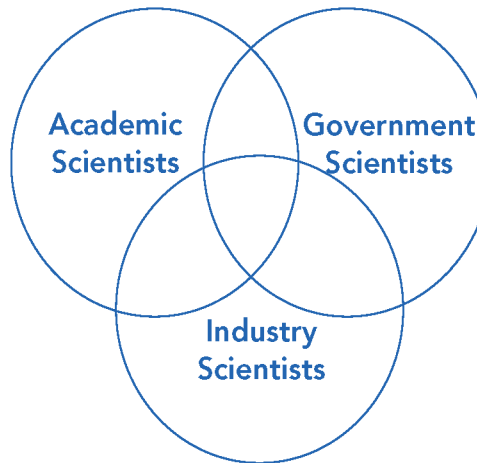
North America

About ILSI North America

Who We Are

The North American Branch of the International Life Sciences Institute (ILSI North America) is a public, non-profit scientific foundation that brings together scientists from government, academia, and industry to work cooperatively and with shared responsibility, to advance the understanding and application of science related to improving the health of the public and the nutritional quality and safety of the food supply.

ILSI North America is the largest, but only one of 16 branches that comprise the global ILSI organization.



What Makes Us Distinctive

- We do not lobby or express policy positions.
- We only comment to Federal notices regarding scientific topics in which we are actively involved.
- Peer-reviewed publications are our major communications vehicle.
- We do not actively engage with media or conduct consumer-directed communications.

We Believe

- In a forum for government, academic and industry scientists to identify, discuss, and resolve scientific issues of common concern.
- That research shall be conducted ethically and transparently.
- In rigorous design and the highest quality of the research.
- In establishing an atmosphere of mutual trust in the conduct of all programs.
- In ensuring the publication of results regardless of outcome.

Our Approach



How We Work

ILSI North America carries out its mission by sponsoring research programs, professional and educational programs and workshops, seminars, and peer-reviewed publications. Our prominent researchers work together to:

- Identify emerging scientific and health challenges
- Generate scientifically verifiable data
- Provide science to help harmonize policies and procedures
- Encourage scientific dialogue

ILSI North America provides a [neutral forum](#) for government, academic, and industry scientists to discuss and resolve scientific issues of common concern for the well-being of the general public. We believe in complete transparency of results, peer-review publication of science, public disclosure of all funding sources, and strong declaration-of-interest policies.

Advocacy for the Use of Science

ILSI does not try to influence legislative or regulatory outcomes. The better the science, the better the decision.

Healthy Collaboration

Our programs rely on healthy collaboration. Scientific processes and scientific outcomes are better when experts from multiple sectors work together to design and execute activities.

Technical & Project Committees

Active Committees

ILSI North America has 13 active technical and project committees that are engaged in projects related to the following areas:

- Bioactives
- Caffeine
- Carbohydrates
- Conflict of Interest
- Dietary Lipids
- Energy Balance
- Food Value Decisions
- Fortification
- **Food Microbiology**
- Food and Chemical Safety
- Low-Calorie Sweeteners
- Protein
- Sodium

Scientific Advisors

Each of our scientific committees is advised by leading academic advisors and government liaisons, who are recognized leaders in their fields. These individuals give generously of their time to ensure the highest standard of work is achieved.

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Technical Committee on Food Microbiology

Research Cycle Process—Host a research roundtable with key federal agencies to identify gaps in food microbial research

- Center for Disease Control (CDC)
- Food and Drug Administration (FDA)
 - Center for Food Safety and Applied Nutrition (CFSAN)
 - Office of Food and Veterinary Medicine (OFVM)
- USDA
 - Agricultural research service (ARS)
 - Food Safety and Inspection Service (FSIS)
 - National Institute of Food and Agriculture (NIFA)
- European Food Safety Authority (EFSA)
- Health Canada
- Bureau of Microbial Hazards, Canada

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Technical Committee on Food Microbiology

Research Cycles: 2010-2012 & 2012-2014

- Mitigation of *Salmonella* in low moisture foods (3 separate studies).
 - How properties of food, fat content, water activity and water mobility can affect the heat resistance of *Salmonella* were examined.
 - Novel procedure was developed for inoculation of *Salmonella* and *E. faecium* into low moisture foods and a novel apparatus for use in heat inactivation studies
- Examined dry sanitation procedures in nut butter processing equipment.
- Use of high-frequency nano-amplitude mechanical vibration as a means to prevent *Salmonella* attachment on dry surfaces.
- Investigating the prevalence of foodborne pathogens in cantaloupe.

ILSI North America Technical Committee on Food Microbiology Grants led to Federal Grants

2012-2014 Research Cycle

Using High-Frequency Nano-Amplitude Mechanical Vibration for Preventing and Reducing Salmonella Attachment on Dry Surfaces

- **\$84,617 to \$380,121 USDA Agriculture and Food Research Initiative (AFRI) Grant**

2010-2012 Research Cycle

Improved Processed Validation Strategies for Salmonella Inactivation on Low Moisture Food Products Subjected to Thermal Pasteurization Processes

- **\$118,750 to \$1,040,000 NIFA Grant**

Influence of water mobility on persistence of Salmonella

- **\$180,000 to \$500,000 NIFA Grant**

***An investment of
\$383,367 lead to
\$1,920,121 in Federal
Grants***

ILSI North America Technical Committee on Food Microbiology

Identification of Spice Research Research Roundtable with Key Federal Agencies

- Spices and seasoning categories were among the top three categories in the FDA Reportable Food Registry submissions for *Salmonella* in foods between 2009 and 2011.
- The presence of *Salmonella* spp. is of particular concern when spices are used in ready-to-eat foods.

ILSI North America Technical Committee on Food Microbiology and ASTA Collaboration

- Collaborated with ASTA in development of a RFP for spices
- Awarded two spice research grants in June 2013
- ASTA provided:
 - \$75,000 in an unrestricted grant to ILSI North America
 - In-kind spices for the research
 - Coordinated visit to Cosmed facility—Dec 2013

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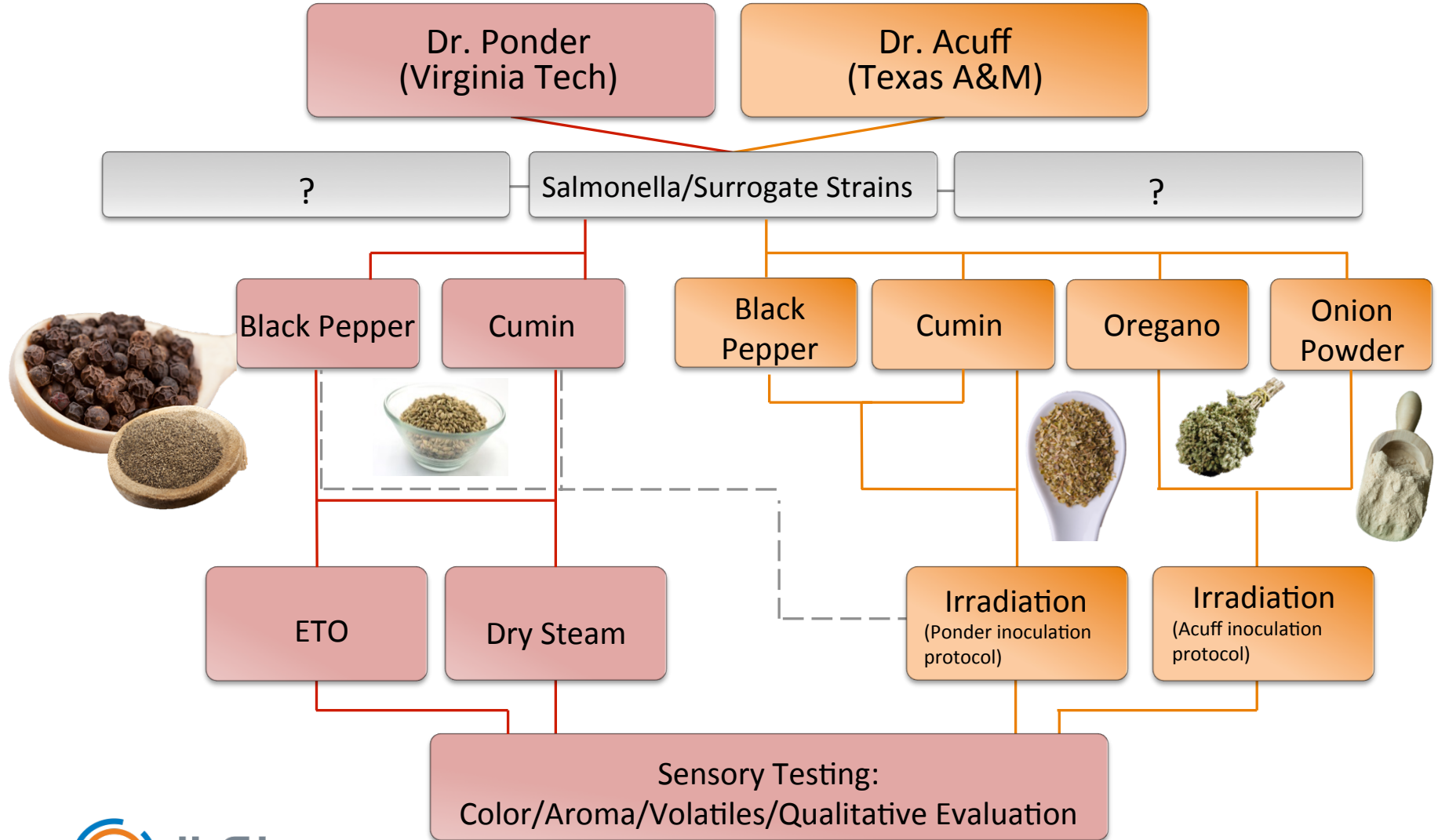
Technical Committee on Food Microbiology

Spice Research Projects

- “Protocol and Surrogate Validation for the Inactivation of *Salmonella* on Spices”- *Monica Ponder, PhD, Virginia Tech.*
Grant Award \$207,688
- “Correlation of Surrogate Bacteria and *Salmonellae* for Validation of Spice/Herb Pathogen Reduction Processes”- *Gary Acuff, PhD, Texas A & M University.*
Grant Award \$142,552

Total Grant Awards
\$350,210

ILSI North America Spice Research Projects



Importance to ASTA Members

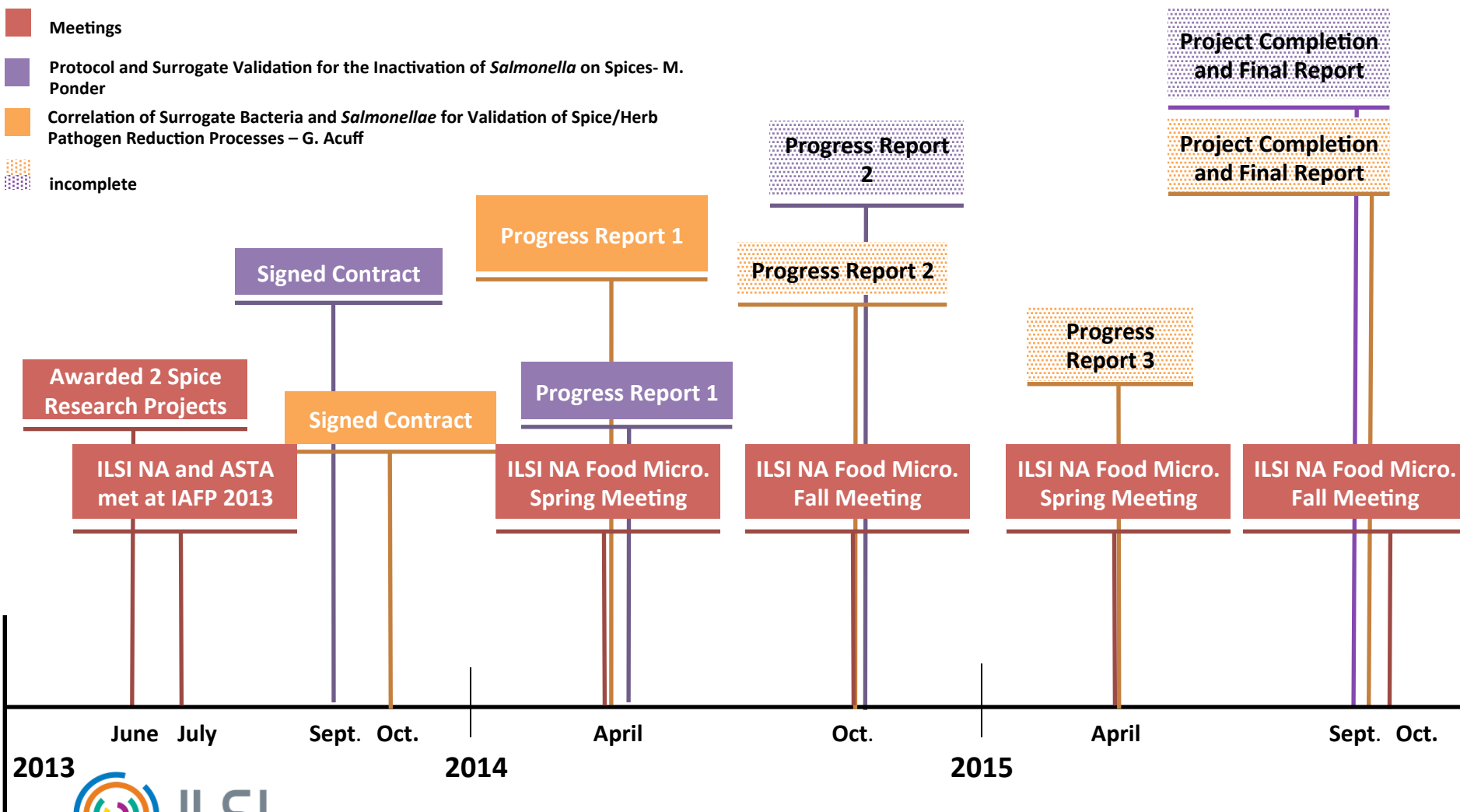
- Technologies used to treat spices and herbs are Critical Control Points that reduce microbiological risk to an acceptable level.
- The treatment of spices protects consumers and prevents recalls due to *Salmonella* contamination.
- Under new FSMA regulations, Critical Control Points that are relied upon to protect the public health, must be validated to assure their effectiveness.

Importance to ASTA Members

- Development of standardized validation protocols provides:
 - Tools to assure the effectiveness of a variety of treatments
 - Consumer protection
 - Regulatory compliance
 - Reconditioning/rework processes acceptable to the FDA
 - Kill-step validated processes should be audited yearly or as directed by a HACCP reassessment by a qualified microbiologist to ensure that a particular process is consistently delivering a desired effect.

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Technical Committee on Food Microbiology



QUESTIONS?