

Tactical Sciences Coordination Network - A1181 (2019)



TACTICAL
SCIENCES
NETWORK

UPDATE

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What are the Tactical Sciences?

- ▶ A *complementary set of programs* that offers tools to *protect the integrity, reliability, sustainability, and profitability of the U.S. food and agriculture system* against threats from pests, diseases, contaminants, and disasters.
- ▶ A well-designed agricultural biosecurity system is supported by **resource management**, relevant research, balanced regulations, and **effective relationships** among scientific experts, policy-makers, and consumers. It requires a *concerted effort*, *sustained investment*, and a **coordinated strategy** to face the vulnerabilities of our nation's food and agricultural system.
- ▶ *TACTICAL SCIENCE: CONTINUING THE COMMITMENT, USDA-National Institute of Food and Agriculture, September 2017*

NIFA Tactical Science Programs



▶ FADI

- ▶ NPDN
- ▶ NAHLN
- ▶ EDEN

▶ NIPMCC / CPPM

- ▶ RIPMC
- ▶ EIP
- ▶ ARDP



United States Department of Agriculture
National Institute of Food and Agriculture



▶ ‘Stand alones’

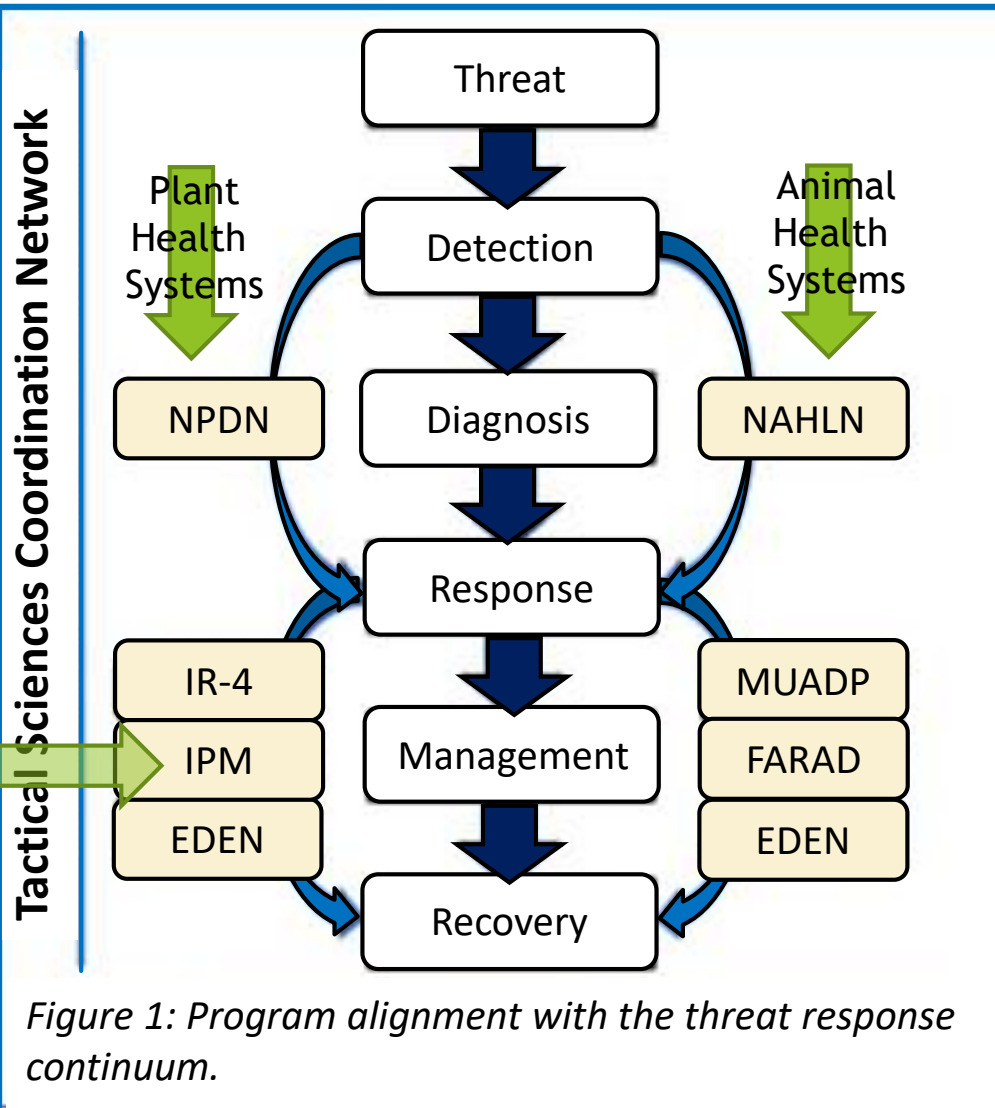
- ▶ IR-4
- ▶ MUADP

- ▶ FARAD *(hope to add)*



Our Continuum...

- ▶ IPM includes
 - ▶ NIPMCC
 - ▶ CPPM
 - ▶ EIP
 - ▶ RIPMC
 - ▶ ARDP





The Isle of Misfit Programs?

- ▶ Congress supports program creation (*well intentioned*).
- ▶ Not so good at continued program support.
- ▶ Powered by denial.



What are the TSN program goals?

▶ Goals:

- ▶ Convene tactical sciences programs to build on **common issues**;
- ▶ Develop a **coordinated** strategy of outreach, communications, and program activities
 - ▶ Cross-network collaboration
 - ▶ Identify common issues
 - ▶ Seek external funding,
- ▶ Develop public-private **partnerships** to sustainably protect the US food supply.



▶ Vital components (as identified by NIFA Call to Conversations)

- ▶ Effectiveness
- ▶ Efficiency
- ▶ Accountability
- ▶ Relationship/Trust



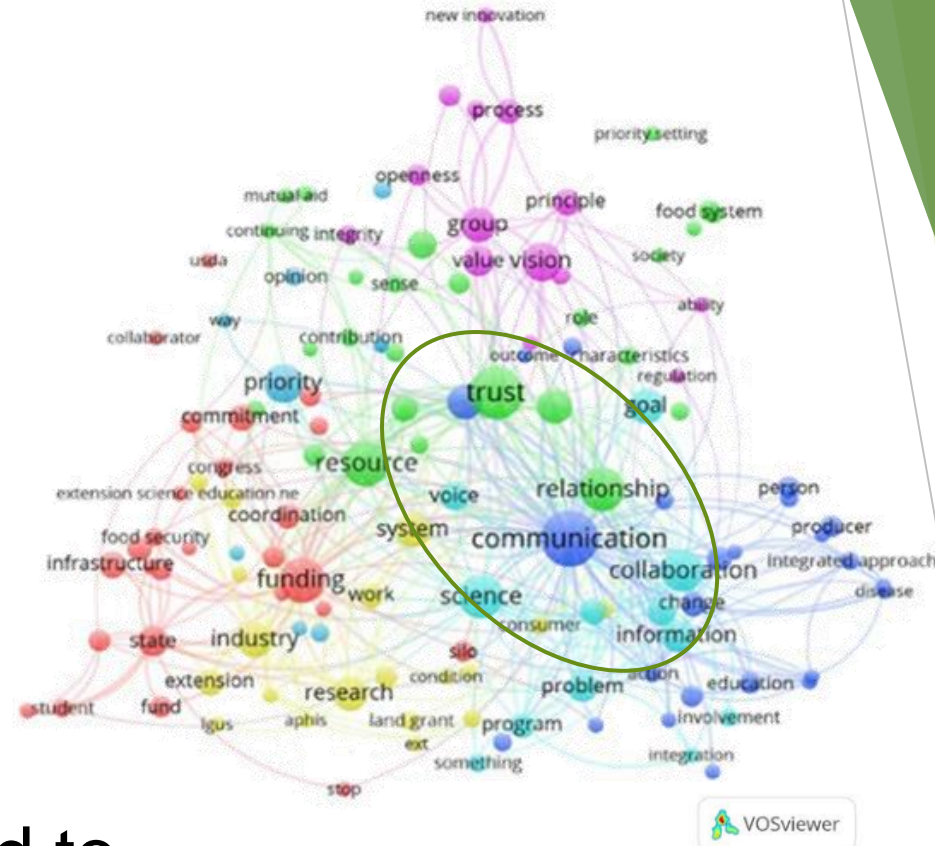
Meetings and progress (*so far*)

- ▶ Introductory virtual meetings
 - ▶ July 28 and August 12
- ▶ Communication plan in process
 - ▶ Branding complete
 - ▶ Website coming soon
 - ▶ Quarterly communication (at least) planned
 - ▶ More frequent collaborative invitations
 - ▶ Podcasts coming!
- ▶ *Slower going while living in the virtual space!*



More progress...

- ▶ Program profiles
- ▶ Program overviews
- ▶ Program lead intros
- ▶ Meeting 1 debrief
 - ▶ Interviews
 - ▶ Analysis



- ▶ Collaboration is closely linked to communication, relationship and trust.

Text map

[*https://nifa.usda.gov/sites/default/files/resource/Tactical-Sciences-report-on-conversation.pdf](https://nifa.usda.gov/sites/default/files/resource/Tactical-Sciences-report-on-conversation.pdf)



Lessons learned from Session I

- ▶ **Lab standards** (certification, accreditation, QC, SOP development, etc.)
- ▶ **Surveillance** (observation networks, citizen science education, etc. – maybe also information sharing/communication?)
- ▶ **Next Generation Scientists/Workforce Development/Succession planning**
- ▶ **Sustainability**
- ▶ **Communications** (audience recognition and messaging)
- ▶ **Stakeholder input** to NIFA
- ▶ **Equipment obsolescence**
- ▶ **Information Technology**



Lessons learned from Session I

- ▶ The stated goals seemed to resonate with the attendees
- ▶ Sense of hesitation to fully embrace the goals
 - ▶ Possible overlap with prior work – calls to conversation
 - ▶ Too ambitious, or not enough?
- ▶ Advice to the TSN project team
 - ▶ Build relationships
 - ▶ Build awareness across programs
 - ▶ Identifying opportunities
 - ▶ Provide leadership and structure
- ▶ Surprises
 - ▶ How little the participants knew about each other's program
 - ▶ How other programs do things like their own program
 - ▶ General overlap and opportunities among programs
 - ▶ How their program could help others



Lessons learned from Session I

- ▶ Challenges
 - ▶ Overcoming organizational silos
 - ▶ Building trust; overcoming perceptions of 'free riders'
 - ▶ Addressing detractors or anti-champions
 - ▶ Finding time
 - ▶ Finding alignment
- ▶ Anticipated TSN Benefits - Perceived benefits that could motivate participation
 - ▶ Better service to customers
 - ▶ Better leveraging of resources
 - ▶ Collaborative action and problem-solving
 - ▶ Discovery of common challenges
 - ▶ Knowledge transfer and sharing among programs



Challenges and catalysts for TSN

(that is effective, efficient, accountable, trust-based)

Challenges

- ▶ History of siloed operations
- ▶ Previous attempts at coordination
- ▶ Low trust levels
 - ▶ Free-rider fears
 - ▶ Concern that others will 'not play nice' - not reciprocate positive actions
- ▶ Turnover among TS program staff (i.e., champions for this project)
- ▶ Anti-champions
- ▶ Time

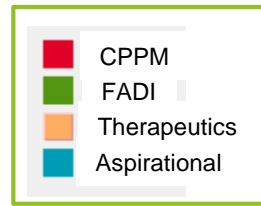
Catalysts

- ▶ Perceived opportunities and benefits
- ▶ Common elements - stakeholders, partners, resources, etc.
- ▶ NIFA 'encouragement' to come together
- ▶ Network-driven change (not top-down)
- ▶ Passion (or at least strong interest)

Current network
analysis state



Intended future
Network Analysis state



- **Points** or nodes: size, color, shape based on attributes
- **Lines** or edges
 - Direction (based on how information flows between points)
 - Value (based on things like trust or frequency of interactions)
- Spacing and layout generally not important
- Descriptive metrics
 - Density - Number of lines out of all possible lines
 - Average Degree - Average number of connections across all points
 - Average path length - Average number of lines from each point to all other points



Upcoming Activities?

- ❑ Project Charter collaboration
- ❑ Further Program analysis
- ❑ Baseline Determination

▶ SWOT

Internal

▶ Strengths

▶ Weaknesses

External

▶ Opportunities

▶ Threats

▶ DMAIC

▶ Define

▶ Measure

▶ Analyze

▶ Improve

▶ Control

Process analysis
likely delayed
until year 2



Upcoming Activities - Project Charter collaboration



PROJECT CHARTER

1. General Project Information

Project Name: Tactical Sciences Network

Executive Sponsors: USDA, NIFA

Programmatic Sponsors: FADIP, RIPPMC

Impact of project: To raise awareness and increase relations

2. Project Core Team

	Name
Project Director:	Marty Draper
Members (role):	
Plant health/ Biosecurity	Jim Stack
Animal health/ Biosecurity	Marty Vanier
Animal health	Jamie Hennings
Food safety/ Disaster response	Londa Nwadike
Food safety	Jeanette Thurston
Evaluation	Drew Rivers
Industry relations	Will Zorilla
Project manager	Adrian Self
Project manager	Chandler Day
Disaster response	David Hogg

3. Leadership/Advisory Team

NFPDN	Carrie Harmon
NAHLN	Christina Loiaco
EDEN	Abby Lillpop
NIPMCC	Ann Hazelrigg
EIP	Ann Hazelrigg
ARDP	NIFA
RIPPMC	Danesha Seth Carter
IR-4	Jerry Baron
MUADP	John Babish

4. Stakeholders (e.g., those with a significant interest)

USDA-NIFA
USDA-APHIS-VS

Submitted by: Martin Draper, 9 Oct. 2020

5. Project Scope Statement

Project Purpose / Business Justification

The existing relationships across TSN programs have provided lessons learned. Some of the programs have leveraged resources. Recognizing these relationships can improve sustainability of the programs, reduce costs, and improve coordination. The project's approach is designed to build on what has worked as stated in the Tactical Sciences: Convergence. In the past, but without the funding needed to sustain it. We aim to build on the success of each other through mutually beneficial relationships across the seamless continuum across the bioscience.

Objectives (in business terms) Description

In keeping with the goal of the Agricultural Sciences Network, the NIFA Calls to Convergence, the project will:

1. Convene members of the TSN and other stakeholders.
2. Develop a Tactical Sciences coordination plan. Including, assembling cross-program teams.
3. Develop a model for public-private partnerships.

Deliverables List the high-level products

Guide to the current state of the program
SWOT analysis across programs.
Symposia.
White papers.

Submitted by: Martin Draper, 9 Oct. 2020

6. Communication Strategy (specify how the project will communicate and Stakeholders, e.g., frequency of status reports, frequency of meetings)

Frequency

- Monthly content-driven communication
- Request content from programs – current highlights

Meetings

- Quarterly meetings as needed (smaller groups – in person)
- Semi-annual remote – report on quarterly small group
- Celebrations, what are you doing that is great, research
- Annual main meeting "F2F" if possible

Types

- Radio (KSRE - Eric Atkinson)
- Podcast with Global Food Systems – Maureen O'Connell
- Web -
- E-mail -
- Twitter / tweets -
- Hot topics in biosecurity – speakers to the group as needed

Submitted by: Martin Draper, 9 Oct. 2020

7. External Dependencies

News section of web page on hot topics?
Podcasts (built from the hot topics?) – perhaps the programs themselves
Annual reports to the sponsor (NIFA)

Symposia

- Associated with
- Target audiences –
- NIFA and other sponsors – APHIS-PPQ, APHIS-VS, FSIS, ARS, FARAD, (Why – confidence in investment, material for advocacy/protecting the budget)
- APLU/Doug Steele (Why - material for advocacy/protecting the budget)
- Deans? (Why - material for advocacy/protecting the budget)
- SAES/ESCOP (Why - material for advocacy/protecting the budget)
- CES/ECOP – link to Monday Letter (Caroline Crocoll)? (Why - material for advocacy/protecting the budget)
- TSN Program leads (Why – keeps them in the loop)
- Industry (Why – baiting for investment)
- Grad student – current and prospective
- Professional societies (APS, Tri-Soc, ASAS, AVMA, AAVID, Am Soc Trop Med & Hygiene? – who are the key societies with each TSN program - IFT, IAFT, EntSocAm, Maybes: ASTA,

	Name	Signature	Date (MM/DD/YYYY)
Executive Sponsor			
Department Sponsor			
Project Manager			

8. Notes

Questions?



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Short-term Expected Outcomes?

- ▶ A commitment to **cross-network communication**.
- ▶ Focus areas are clearly understood by peer networks – the consortium shares a **collective vision** and results framework.
- ▶ **Stakeholders and decision-makers** are aware of the networks and understand the value.
- ▶ The **partnership*** shares a plan of action.
- ▶ **Operational structure** for a national consortium is established with key roles, responsibilities understood.

** Internal and external*



Mid-term Expected Outcomes?

- ▶ A **communications** framework is in use.
- ▶ **Teams** are formed, communicating and functioning to develop projects and seeking external support.
- ▶ **Industry partners** are “buying-in” to the sustainability plan.
- ▶ Partner networks deepen their **collaborative relationships**.
- ▶ The partnership shares the **implementation of a plan** of action.
- ▶ More **policy statements** support the goals of the consortium.
- ▶ **Policymakers** adopt a common language in policy and regulations.