



FERN:
Food Emergency Response
Network
Cooperative Agreement Program
update
FY21



Mission of FERN

- Integrate the nation's multilevel food-testing laboratories to detect, identify, respond to and recover from a **bioterrorism** or **public health emergency/outbreak** involving the food supply
- **Detection**: identification of biological, chemical, and radiological threat agents
- **Prevention**: operate targeted federal/state surveillance sampling programs
- **Preparedness**: strengthen laboratory capacities and capabilities
- **Response**: provide large-scale laboratory testing capacity
- **Recovery**: provide public assurance of food safety following an emergency



FSIS/FERN Cooperative Agreements

- A transfer of money, property, services or anything of value to recipients to accomplish a public purpose of support or stimulation.
- Requests For Applications – through Federal Register
- FSIS/FERN currently has cooperative agreements in all three disciplines:
 - Microbiology
 - Chemistry
 - Radiological
- State laboratories, geographically dispersed.



Laboratory Makeup

- **169** Laboratories representing 50 US States and Puerto Rico have satisfactorily completed FERN Laboratory Qualification Checklists
 - Affiliations:
 - **35** Federal (FDA, USDA/FSIS, USDA/AMS, DHS, CBP)
 - 118 State
 - 16 Local
 - Disciplines:
 - 133 Microbiological
 - 113 Chemistry
 - 33 Radiochemistry

***Must be FERN accepted to apply for FY21**



FSIS FERN CAP LAB MISSION

- FSIS FERN Cooperative agreement labs:
 - Support and provide FSIS food defense analyte testing capability in FSIS products
 - Provide surge capacity in large scale food borne events involving FSIS products
 - Provide analytical support in special National Special Surveillance Event (NSSE) sampling
 - Provide capability and capacity in support of FSIS special needs (outside of FSIS Regulatory Lab Capacity/capability)

Budget Cut

- Reduction of \$815,000 in Cooperative Agreement Program (CAP budget –
3.415M to 2.585M
 - No single discipline labs
 - All training programs eliminated
 - No support for further development of FERN website
 - Loss of 2250 samples obtained at retail and screened for microbiological, chemical and radiological food defense agents

FSIS FERN Cooperative Agreements

- **Expected amount of individual awards:** individual award amounts are expected to be \$230,000 per laboratory.
- **Anticipated Start Date:** September 30, 2020
- **Period of Performance:** Each award is a 1 year award with a potential for non-competitive renewal an additional 4 years dependent upon annual appropriations and approved performance for a total of a 5 year cycle.
- **Award type:** This award is a cooperative agreement involving substantial involvement of the awarding Agency. Awardee should expect to have a project officer assigned to them for regular discussions and to assist, guide, coordinate, or participate in the project activities.

Proposal

- No Template
- Facility Description (Limit 10 pages)
 - Laboratory/facility infrastructure (e.g. size of the laboratory, secure receiving facility, biosafety level II and III room availability, food testing personnel, accreditations, LIMS, SOPs)
 - Laboratory role in food testing (e.g. routine food testing, outbreak sample testing, number of food samples tested annually, current regulatory program activities such as state program, MPI, ALP, MFRPS, AFRPS or others)
 - Laboratory role in food defense or bio-threat testing in their state
 - Current testing capabilities (microbiological analytes, chemical analytes, radiological analytes, instrumentation, emergency sample throughput capacity)
- Project Description (Limit 20 pages)
 - Describe how you meet the requirements
 - Projects you wish to work on must all have detailed:
 - Timelines
 - Budgets
 - Training

Laboratory Capabilities

- 1) Laboratory must be FERN approved in at least two of the three disciplines (microbiology, chemistry, and/radiochemistry) prior to application submission.
- 2) Labs will propose and perform mandatory projects *and* additional projects in their approved disciplines during the award year.
- 3) Ability to perform screening assays/FERN methods for the following microbiology food defense analytes in foods:
Bacillus anthracis, Yersinia pestis, Francisella tularensis, Brucella spp., Burkholderia spp., Shigella dysenteriae, Clostridium botulinum toxin, Ricin toxin, staphylococcal enterotoxins, Abrin toxin, Alpha amanitin toxin
- 4) Ability to perform screening assays/FERN chemistry methods in the following areas:
GC/MS assays (FERN CHE0006.01);
LC/MS assays (FERN CHE0008.00);
Screening for metals (FERN CHE0009.01 (based on EAM4.7)/FSIS MLG TM3.06);
- 5) Ability to perform screening assays/FERN radiochemistry methods in the following areas:
Gross alpha emitters; FERN-RAD.0003.00 FERN Rapid Prep for Gross Alpha Analysis
Gross beta emitters;
Gamma emitters; General Guidelines for Determining Gamma Emitting Radionuclides (Interim)

Laboratory Capabilities

- 6) Select Agent Registration (SAR) preferred; if not SAR then MOU for “cannot rule out” isolates with transfer protocol in place to SAR facility and/or LRN site. If not select agent registered, labs should include an MOU and/or protocol for transfer to the SAR facility for confirmation of microbiological agents.
- 7) Current BSL3 capable laboratory preferred.
- 8) Accredited to ISO 17025 for food analysis preferred.
- 9) Lab has proper facilities to work with stated agents and agrees to accept unknown samples for testing.
- 10) Laboratories choosing to participate in the program at this level will be expected to regularly perform the following activities:
 - Participate in all FERN PTs in the approved discipline.
 - Participate in appropriate FERN training courses.
 - Participate in FERN workgroups through attendance to monthly calls, sharing of expertise, and sample testing.
 - Participate in FERN Regional and FERN wide conference calls and activities.
 - Presentation of project progress and milestones to FSIS personnel by webinar.

Review of Proposals

- A group of reviewers will be utilized to score all applications received by the deadline as stated in Section D. Reviewers will provide an overall score to reflect their assessment of the proposal. Final panel scores will be forwarded to the selection official for ranking and selection. Reviewers will consider each of the areas below:

Facilities – 20 Points

- Personnel – 20 Points
- Testing Capacity – 20 Points
- Demonstrated Capability - 20 Points
- Laboratory Procedures, Policies, Support, Management – 20 points

Areas to be considered in selection of laboratories:

- Diversity of testing capability – screening ability for select agents, toxic chemicals and drugs, radiochemistry analyses
- Geographic diversity
- Multiple disciplines per laboratory (i.e., minimum 2 per lab)
- Forensic analysis including: product tampering, packaging, photo documentation, and testimony
- Past Performance in FERN programs (CAP, PTs, Training, Regional/FERN Wide phone calls, etc)

Important Dates

- *Announcement Date* – March 2, 2020
- *Deadline for Submission of Proposal* – April 10, 2020
- *Notification of Intent to Award* – May 15, 2020
- *Deadline for Submission of Final Paperwork* – June 29, 2020

Required Projects

(All laboratories will participate in the following projects for the FY21 CAP year.)

- Food Defense Surveillance
 - a minimum of 15 samples per month for microbiology
 - a minimum of 15 samples per month for chemistry
 - a minimum of 20 samples per *quarter* for radiochemistry
- Capability and Capacity Exercise
- Special Event Testing (SSE, NSSE)

Additional Projects

(projects should be written for completion within one award year; laboratories would be expected to propose at least one project per discipline.)

Priority

- Catfish Traceback
- Extraneous Materials/Filth Testing

Desired

- State Special Event Testing
- Universal Extraction Method for LC/GC-MS analysis
- Addition of analytes to FERN CHE.0009 from FSIS methodology
- *Clostridium perfringens* Method
- MALDI-TOF analysis of FSIS matrices for microbiological agents
- Method development
- State Proposed project
- LC-MS Course
- ICP-MS Course

Contacts

- Patrick Sisco
 - Patrick.Sisco@usda.gov
 - 706-546-2382
- Kevin Vought
 - Kevin.Vought@usda.gov
 - 651-201-6085
- Robert Phillips
 - Robert.Phillips@usda.gov
 - 706-546-2349
- Marcus Head
 - Marcus.Head@usda.gov
 - 706-546-2336
- Randy Layton
 - Randal.Layton@usda.gov
 - 706-546-3656