

GRANTS PROGRAM: THE CENTER FOR PRODUCE SAFETY – UPDATED MAY 27, 2019

**CPS Regionally Coordinated Agricultural Production–Water Treatment Baseline Program
2019 Request for Proposal Guidance: Full Proposal**

Full Proposal – Due by 12:00 noon PST on Tuesday, August 20, 2019 – all forms to be sent in one email with separate attachments to proposals@centerforproducesafety.org

The Center for Produce Safety (CPS) is a 501(c)(3), U.S. tax-exempt, charitable organization focused exclusively on providing the produce industry and government with open access to the actionable information needed to continually enhance the safety of produce.

All sections below are required for a complete proposal package:

Award Requirements and Commitments

All proposals must include a description of, minimally, five open environment study sites. Ideally these sites would be at an on-farm surface water source distributed across a regional project zone but may include a public access location of an environmental or surface water conveyance system available for specialty crop grower use. All proposed private, on-farm source sites must be supported by a Letter of Cooperation signifying commitment to provide access for the duration of the project.

To achieve the desired goal of a robust and comparable dataset matrix of diverse surface water sources and antimicrobial treatment systems, **secured commitment for 100 percent regionally-acquired matching funds** must be demonstrated in the proposal. To be clear, this requirement is a **real dollar for real dollar match** for technical staff salaries and benefits, consumable laboratory and field sampling or research supplies, travel to sampling and research sites, and enabling analytical equipment or services directly applicable to the project and associated proposed research objectives. Allowable proposed matching funds do not include in-kind dollar calculations for a non-budgeted individual's time (i.e., principal investigator, technical staff or advisor, administrator, contracted advisor/service provider, farming operation, or ag-chemical company technical services). Qualifying in-kind matching funds for a donated commercial-scale antimicrobial treatment system (including novel pilot-scale systems) will be considered by CPS, based on a projected lease cost value for the fractional time interval of use in on-farm studies.

Section

Cover Sheet

Title Page

**Layperson's Summary of Proposal – description of regional profile and any crop targets/models
Proposal (A–H, 10 pages maximum)**

- A. Technical Abstract - covers both required regional coordinated studies and any experimental objectives
- B. Standard Baseline and Open Environment Study Sites Work Plan
- C. Background for any experimental studies
- D. Hypothesis for any experimental or modeling studies
- E. Research Objectives for any experimental or modeling studies
- F. Experimental Plan and Methods
- G. Beneficiaries, Potential Impact on the Produce Industry, and Outcome(s)

H. Potential Pitfalls to Accomplishing Objectives

Proposal - Additional Information (I–P, no page limit)

- I. Project Work Plan/Timeline
- J. Relevant Facilities and Equipment Available for Research
- K. PI, Co-PIs and Cooperators and Their Roles
- L. Explanation of Related Research Funding
- M. Previous Submission to Federal, State Grant Programs or other programs
- N. Project Oversight
- O. Performance Monitoring Plan
- P. Literature Cited/Bibliography

Additional Required Documents (no page limit)

Budget Summary and Justification – includes match funding and evidence of a secured source

Current and Pending Support for PI and Co-PIs

Biographical Sketch for PI and Co-PIs

Letters of Support from Industry Cooperators

Abbreviation and Acronym Key

Institutional Permits and Authorizations (Confirmation of Institutional Permits and Authorizations to Conduct Restricted Laboratory Research and Studies Involving Animal or Human Subjects)

FULL PROPOSAL FORMAT

For the Title Page, Layperson’s Summary and sections A–P use a sans serif font (Arial or Calibri preferred) no smaller than 11 point. Use 1-inch margins on all sides and single line spacing. Number pages for sections A–P at the bottom. The body of the proposal (sections A through H) may not exceed 10 pages. The Title Page, Layperson’s Summary, and sections I through P are *not* included in the 10-page limit. Also, the “Additional Required Documents” are *not* included in the 10-page limit.

Templates for the additional required documents (Cover Sheet, Budget Summary and Justification, Current and Pending Support, Biographical Sketch, Institutional Permits and Authorizations) for the 2019 ag water proposals will be provided to each PI. The forms were created with MS Office 2010. If you have an earlier version of MS Office you may need to "save as" and select your version. Follow the format, style and guidelines described here.

Cover Sheet

- Use the [2019 AW RFP Cover Sheet template](#) and complete all sections.
- The cover sheet must be signed by the Principal Investigator, all Co-PIs, and by an official authorized to sign for their institutions. Signatures and institutional approval for the PI and Co-PIs may appear on separate cover sheets.
 - The *Principal Investigator* (PI) is that person whose name appears first on the title page of the proposal. The PI is mutually agreed upon by the cooperating scientists and is responsible for submission of scientific reports, administration of the grant, notification of changes in the work plan or budget, and maintaining contact with CPS. The affiliated institution of the PI becomes the *principal institution* and signs the research agreement.
 - *Co-Principal Investigators* (Co-PIs) are those persons whose names appear after the PI on the title page of the proposal. Co-PIs are individuals who are involved with the PI in the scientific development or execution of a project. The Co-PIs may be affiliated with the PI’s organization or another organization participating in the project.

- Proposals from USDA Agricultural Research Service scientists should have prior approval through USDA's "ARIS, Incoming Agreements" process for CPS indirect cost restrictions and budget requirements.

Title Page

- Project title: Provide a clear, concise title that describes the project. Capitalize only the first word and proper nouns. Title may not exceed 130 characters and spaces.
- Principal Investigator: Name, institutional affiliation, mailing address with zip +4, phone number, email address.
- Co-PIs: Name, institutional affiliation, mailing address with zip +4, phone number, email address.
- Industry and/or Academic Cooperators: Name, title, company, mailing address, phone number, email address.

Layperson's Summary of Proposal

- Summarize your proposal in non-technical language suitable for dissemination to the public.
- Provide a description of the project, objectives and methods to be employed.
- Do not exceed 200 words.

Proposal Proper (Sections A–H, 10 page maximum)

A. Technical Abstract

- Provide a concise summation of the proposal to the reviewers.
- Conclude with a clear impact statement derived from the anticipated outcomes.
- Do not exceed 500 words.

B. Background

- Write a concise statement of the project purpose – focus on the specific issue, problem, or research need to be addressed AND explain why this project is important and timely.
- Do not include general food safety data re: number of outbreaks and illness cases etc.

C. Hypothesis

- Clearly state the hypothesis-driven approach that conveys the rationale and biological or technological foundation for the proposed research.

D. Research Objectives

- Number the objectives (to clearly identify) and arrange in a logical order

E. Open Environment Study Sites

- **All proposals must include a description of, minimally, five (5) open environment study sites.** Ideally these sites would be at an on-farm surface water source distributed across a regional project zone, but may include a public access location of an environmental or surface water conveyance system available for specialty crop grower use. All proposed private, on-farm source sites must be supported by a Letter of Cooperation signifying commitment to provide access for the duration of the project.

F. Experimental Plan and Methods

- For each research objective discuss the procedures you propose to use.
- Provide clear details of relevant biological strains, experimental design or parameters of data collection, sampling and sample analysis protocols, and anticipated statistical analysis.
- Emphasize quantifiable and measurable outcomes.

G. Beneficiaries, Potential Impact on the Produce Industry, and Outcome(s)

- Name the regional beneficiaries of the project and how they will be impacted.

- Address how this project will guide more specific and effective risk management practices.

H. Potential Pitfalls to Accomplishing Objectives

- Describe the pitfalls that may be anticipated and your strategies for overcoming these pitfalls.

Proposal – Additional Required Information (Sections I–P, no page limit)

I. Project Work Plan/Timeline (Projects may begin as early as November 1, 2019, must be completed and final report prepared by April 30, 2021)

- Use a 3-column table to provide a work plan that clearly delineates the activities and timeframe to achieve each objective within the term of the project.
- Include the following headings and information in the work plan table:
 - *Project activity* – activities necessary to accomplish the project objectives.
 - *Performed by* – personnel involved in each activity.
 - *Timeline* – month and year in which you estimate the activities will start *and* end.
- Include required reports in the work plan:
 - Two progress reports – due March 31, 2020 and September 30, 2020
 - Final report – April 30, 2021
- Include travel to participate in PI Methods & Standards Coordination Meeting on November 13–14, 2019 (half-days, location to be determined).
- Include presentation of research progress and/or final results at the CPS Research Symposium:
 - Present interim results at June 2020 symposium and final results at June 2021 symposium.
- If subcontractors or collaborative arrangements are used in your project, include their activities.
- Integrate your data collection plan into the project timeline.

J. Facilities and Equipment Available for Research

- Briefly describe the facilities and equipment available to you to achieve the proposed objectives.

K. PI, Co-PIs and Cooperators and Their Roles

- Specify the role of project personnel (PI, Co-PIs, support staff, industry cooperators and/or academic cooperators) in achieving the project objectives.
- Include their titles and estimated percent of time they will devote to this project.

L. Explanation of Related Research Funding

- Identify your current or pending research funding that has relevance or overlap with the proposed research (see section M also).
 - If there is overlap, briefly discuss how the objectives for this proposal are unique or supplement current or pending research.

M. Previous Funding and/or Submission to Federal, State Grant Programs or other programs

- State whether the project has been submitted to or funded by another federal, state or other program, and describe how the project supplements and does not duplicate funding efforts.
- If the project has not been submitted to or funded by another program, state that it has not.

N. Project Oversight

- Describe the oversight practices that provide sufficient knowledge of all grant activities to ensure proper and efficient administration. Address the following:
 - Identify the PI and Co-PIs who will oversee the project activities.
 - Describe how the oversight will be performed.
 - Include time frame for oversight practices.

O. Performance Monitoring Plan

- Describe the process of collecting and analyzing data to meet the outcome-oriented objectives. Address the following:

- Who will collect the data? How and where will the data be collected?
- Outline how data gathered will be used to correct deficiencies and improve performance.

P. Literature Cited/Bibliography

- Identify 2–3 papers within your Bibliography that best support your proposed work—this will assist reviewers of the full proposal.
 - Attach pdf copies of these papers with your proposal.

Additional Required Documents (no page limit)

Budget Summary and Justification

- Use the 2019 AW RFP Budget Summary & Justification template.
- Requirements and restrictions for Budget Summary and Justification are provided in this Guidance document (pp. 6–8). This document must be included in the complete proposal PDF and returned as an additional attachment.

Current and Pending Support for PI and Co-PIs

- Use the 2019 AW RFP Current & Pending Support template.
- Include this proposal under pending support.

Biographical Sketch for PI and Co-PIs

- Use the 2019 AW RFP Biographical Sketch template.
- Maximum of 2 pages for each investigator.
- Include only publications most relevant to this proposal.

Letters of Support from Industry Cooperators

- Include a signed letter of financial support from each source.
- Include a signed letter of support for *each* industry cooperator, specifying their role in the project objectives and any facility infrastructure or in-kind support they will provide.
- The review of your proposal includes an evaluation of your industry cooperators. Letters of support from them are strongly recommended.

Abbreviation and Acronym Key

- Include key for all abbreviations and acronyms used in proposal and budget justification.

Institutional Permits and Authorizations (i.e., Confirmation of Institutional Permits and Authorizations to Conduct Restricted Laboratory Research and Studies Involving Animal or Human Subjects)

- Use the 2019 AW RFP Institutional Permits & Authorizations template. Sign and date the form.

Optional Document

Suggested/Restricted Reviewers

- You may send a short list of suggested reviewers for consideration. Likewise, you may include a short list of persons to whom the proposal should *not* be sent for review.
 - List the names, titles, affiliations, addresses, email addresses, and phone numbers; include a brief justification for any restricted reviewers.
- Send this document by email to proposals@centerforproducesafety.org no later than Tuesday, August 20, 2019 @ 12:00 noon Pacific Standard Time – Late applications will not be accepted.

BUDGET REQUIREMENTS AND RESTRICTIONS

Budget Summary and Justification

Use the [2019 AW RFP Budget Summary & Justification template](#) and provide all requested information. Complete the 1-page budget summary for your project and provide budget details and justification on separate justification forms for Year 1 (11/1/2019 – 4/30/2021) and Symposium only (Year 2) (5/1/2021 – 6/30/2021). If you will be issuing a subaward or subcontract to another university or organization, include the total amount for that subaward in your budget under Contractual. Each Co-PI receiving a subaward must complete a scope of work statement and separate budget summary and justification form that will be submitted with your proposal.

The Budget Summary and Justification forms in the template are MS Excel 2010 spreadsheets. On the justification forms you may add or delete rows from budget categories as needed. Cells were merged to create this form, so “auto resize” will not work. You may need to manually resize row height to view all text if cells contain a large amount of text (e.g., salary, travel, supplies, etc.).

Personnel

- **Salary:** Funds may not be requested for salary for the PI or Co-PI(s), even if they are only partially funded by their universities or organizations. The budget may include salary for support personnel (e.g., lab staff, undergraduate and graduate students) proportional to the time devoted to the research project. For the PI and Co-PIs, show their title, percent of full-time equivalent (FTE) for this project and zero salary. For each support staff member, show their title, percent of full time equivalent (FTE) for this project, annual salary, and the corresponding salary requested. For students, tuition remission and other forms of compensation paid as substitute for, or in lieu of, salaries and wages must be treated as direct cost (and can be included in indirect cost [8%] calculations). Tuition remission may be charged on an average rate basis. See [§200.466 Scholarships and student aid costs](#). Tuition remission in addition to salaries and wages must be treated as an “Other” direct cost, and is not included in indirect cost calculations.
- **Fringe Benefits:** Funds may not be requested for fringe benefits for the PI or Co-PI, even if they are only partially funded by their universities or organizations. The budget may include fringe benefits for support personnel proportional to the time devoted to the research project. For each support staff member, show their title, salary requested for the project, fringe benefit rate (as a percentage of salary), and the corresponding benefits requested. Fringe benefit rate may not exceed 50% unless supported by formally established policies of the organization, be consistently applied, be reasonable for the services rendered, and be supported with adequate documentation.

Travel

- Travel funds may be requested for field work and for meetings with Co-PIs or cooperators. Travel funds should be requested for the PI to travel to present research progress at the CPS Research Symposium, and for the PI and one Co-PI to travel to present *final* research results at the CPS Research Symposium. (Note: Symposium 2021 location is not confirmed.)
 - Ag water projects:
 - Required travel for PI to PI Methods & Standards Coordination Meeting (Year 1)
 - Required travel for PI to June 2020 symposium (Year 1) (San Diego, CA)
 - Required travel for PI and Co-PI to June 2021 symposium (Year 2) (Location TBD)
- In a brief narrative statement, provide the following information for each trip requested:
 - Origin, destination, and month/year
 - Purpose of trip

- Total amount of funds requested for trip
- Number of trips required for this purpose (if more than one during the year)
- Number or titles of people traveling
- Number of days traveling/person
- Estimated airfare costs/person
- Estimated ground transportation costs/person
- Estimated lodging costs/person (rate and number of nights)
- Estimated meal costs/person (cost per day and number of days)
 - Estimated mileage costs for use of a private vehicle (# miles * 58.0 cents/mile, or the current Internal Revenue Service standard mileage rate at: <https://www.irs.gov/tax-professionals/standard-mileage-rates>.
- Travel funds may not be requested to attend or present research results at other professional meetings.
- All travel costs must be substantiated by receipts. Costs not substantiated by receipts are considered unallowable and will not be reimbursed. Credit card statements are not acceptable as receipts to support travel costs.
- Reimbursement is for actual costs up to the maximum allowance for meals, incidentals, and lodging expenses for each complete 24 hours of travel. The maximum travel rates allowable are the lesser of the rates in effect at the time of travel as established by the United States (U.S.) [General Services Administration \(GSA\)](#). Recipient's established travel policy may be followed, as long as reimbursement does not exceed GSA amounts. Per Diem is not allowed during same day, in state travel.

Equipment (*single item purchase with a cost \geq \$5,000 and a useful life of more than one year*)

- Funds for nonexpendable equipment will only be considered under special circumstances when the equipment is essential for completion of the proposed work. Detailed supporting information (including a justification and quotes) should be attached for any request for nonexpendable equipment.
- If the cost is under \$5,000, include under Supplies and Materials.

Supplies and Materials

- Funds are allowed for materials and expendable supplies needed to conduct your research.
- Provide an itemized list of the materials and supplies, their purpose in your research, the estimated quantity and per-unit cost.

Contractual

- If you will be issuing a subaward or subcontract to another university, include the total amount for the subaward in your budget under Contractual.
- The Co-PI receiving the subaward must complete a statement describing their work on your project and a separate budget summary and justification to be submitted with your proposal.
- Contractual work must indicate whether Flat Fee or Hourly rate is used. Hourly rates may not exceed 2018 GS-15 Step 10 of Federal Pay Scales unless justification is provided and approved. Flat Fee estimates must indicate how you arrived at the rate. Specific information for your area is available at <https://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/#url=2019>.
- CPS requires all procurement transactions be conducted in a manner providing full and open competition and consistent with the procurement standards of Federal regulations [2 CFR 200.317 – 200.326](#).

Other Costs

- Provide an itemized list describing other costs, their purpose in your research, the estimated quantity and cost.

- Appropriate other costs include:
 - Rental of special purpose equipment required to complete your research.
 - Outreach materials, shipping and handling if the project includes an outreach component.
 - Preparing and publishing the results of your project, including illustrations, page charges, and reprints.
 - Biohazardous waste disposal fees.
 - Stipends to participants in field studies.
 - Computer-based retrieval of scientific and technical information, if such services are required for completion of the project objectives and it is the normal policy of the recipient institution to charge for the use of such facilities.
 - Tuition reimbursement.
 - Annual CPS Symposium registration of \$600 for PI. Co-PI or student allowed on final year only.

Indirect Costs

- For this RFP, prepare proposal budgets using a rate of 8% of personnel costs (salary + benefits).
- See information below regarding restrictions on allowable costs.

Budget Restrictions

Awarded projects may be selected for funding by the Specialty Crop Block Grant Program (SCBGP). PIs will be required to modify budget summary and budget justifications accordingly. During the proposal stage, a budget summary and justification should be prepared with the assumption that all costs will be allowable. Awarded projects must be compliant with federal requirements published in the Code of Federal Regulations and subject to the Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards, contained in [2 CFR part 200](#) and [CFR part 400](#), located at www.ecfr.gov.

Indirect Costs:

Prepare all proposal budgets using an indirect cost rate of 8% of total personnel (salaries/wages plus fringe benefits). Once the funding source for an award is assigned by CPS, we will request the budget summary and justification be revised to reflect the sponsor's indirect cost rate restrictions:

- Costs that are a part of the institution's indirect cost pool (e.g., facilities and administrative costs) may not be reclassified as direct costs for the purpose of making them allowable.

Capital Expenditures:

Award funds cannot be used for the renovation or refurbishment of research spaces; the purchase or installation of fixed equipment in such spaces; or for the planning, repair, rehabilitation, acquisition, or construction of a building or facility.

All budgets must be approved by CPS and the corresponding funding agency. The budget summary and justification must contain sufficient detail and be approved by the funding agency prior to execution of an award. Budget revisions requested must be submitted in a timely manner or funding may be delayed or rejected.

TO SUBMIT YOUR PROPOSAL – ALL ITEMS ARE REQUIRED TO BE SEPARATE ATTACHMENTS IN ONE EMAIL MESSAGE

1. Email all four required documents should be sent in one email as separate attachments to proposals@centerforproducesafety.org by **12:00 noon (Pacific) on Tuesday, August 20, 2019.**
 - a. **Complete proposal** as a **single PDF document.**
 - b. **Proposal Summary**—as a **single MS Word document.** Use the 2019 AW RFP Proposal Summary template (to provide the project title, layperson’s summary, technical abstract, research objectives etc.).
 - c. **Single PDF document** containing copies of 2–3 relevant papers cited in your Bibliography that best support your proposed work (see section P).
 - d. 2019 Budget Summary & Justification **Excel worksheet.**

Include ALL the following documents in this order in your complete proposal PDF upload file:

- Cover Sheet form
- Title page
- Layperson’s summary
- Sections A–H (10-page limit) and Sections I–P
- Budget Summary and Justification form for PI (note: If full proposal is selected for funding, original excel document will be requested.)
- Budget Summary and Justification form for subaward or subcontract (if applicable)
- Statement of scope of work for subaward or subcontract (if applicable)
- Current and Pending Support form for PI and Co-PIs
- Biographical Sketch forms for PI and Co-PIs
- Letters of support from industry cooperators
- Abbreviation and acronym key
- Institutional Permits and Authorizations form (Confirmation of Institutional Permits and Authorizations to Conduct Restricted Laboratory Research and Studies Involving Animal or Human Subjects)

Optional document

- You may submit a short list of suggested or restricted reviewers for consideration. Provide names, titles, affiliations, email addresses, and phone numbers; include a brief justification for restricted reviewers. Send by email to research@centerforproducesafety.org by Tuesday, August 20, 2019. **Do not include this document in the proposal.** This should be a separate document.

Note: Proposals will be evaluated by a review panel of at least three experts drawn from the CPS Technical Committee and/or ad hoc reviewers, as appropriate. CPS will provide feedback to all PIs whose projects were not selected for funding.

AWARD NOTIFICATION

The CPS Executive Director will notify successful applicants after a peer review of all proposals. The announcement of awards is expected in September 2019.

REPORTING REQUIREMENTS

- Progress reports (~3 pages) will be submitted to CPS by email. The format will be provided by CPS. These will be due on March 31, 2020, and September 30, 2020.
- Final report (~5–15 pages) will be submitted to CPS by email. The format will be provided by CPS. This report will be due April 30, 2021, at the end of the research project term.
- All research results reported in the progress and final reports will be public information and posted on the CPS website.
- CPS Research Symposium
 - All PIs funded by The Center for Produce Safety are required to participate in the annual CPS Research Symposium and present results of their research.
 - For an ag water project you will prepare a poster to send to the CPS Research Symposium in June 2020. You will present final research findings at the CPS Research Symposium in June 2021.
- Written progress and final reports of results will appear in the proceedings of the symposium and will be posted on the CPS website.
- The CPS Technical Committee and Advisory Board are studying the possibility of publishing research presented at the symposium as a collection of peer-reviewed articles in a scientific journal devoted to food safety.
- All publications must acknowledge CPS and may acknowledge other funding.

SUGGESTIONS FOR A SUCCESSFUL PROPOSAL

- A significant volume of literature exists in produce safety microbiology and related fields. The CPS Global Research Database is a resource that can be used by PIs to review the current literature: www.centerforproducesafety.org/global_research_database.php. Reports for previously funded CPS research are also available online (http://www.centerforproducesafety.org/grant_opportunities_awards.php) and these data may not yet be published. PIs should ensure that they have adequately reviewed the literature and that they describe how the proposed research will complement or expand on existing research.
- **The most common criticisms stated by reviewers are that the submitted proposals are *vague, overly ambitious or unfocused*.** Present clear objectives, well-founded hypotheses, and work plans that address the stated objectives. Provide clear and thorough details of the methods to be used—if this section is not adequately addressed the proposals will be rejected. Also clearly address potential pitfalls or experimental dependencies.
- The produce industry is very dynamic, and practices that were common five years ago may no longer be routinely practiced. In addition, practices for a given crop are often region specific. PIs are encouraged to reach out to the produce industry (independently or through CPS) as they are preparing their proposals to make sure the proposed research applies to regionally appropriate and current practices.
- The review process will focus on the scientific merit of the proposed research and the relevance of the proposal to the produce industry as described in the RFP research priorities and specific questions.
- It is not necessary for a proposal to address all aspects of a specific question in the RFP research priorities. These questions are guidelines as to what the industry has identified as priorities, but it is understood that they are broad in scope and may be beyond the reach of a single research proposal.
- A key function of CPS is to fund research that can be used by growers, harvesters, shippers and processors to solve critical food safety problems, to provide new insights to optimization of processes, or to establish a novel directional basis for future research. Be sure your proposal aims to advance a near-term solution to a specific food safety problem.
- Careful formatting and proofreading are essential for professional evaluation of the proposal. In addition to the expectations for professional organizational style, spelling and grammar, give careful attention to budget and justification calculations, correct citations, and the quality of any imbedded images, figures, or graphs.

CPS CONTACT

Send questions to research@centerforproducesafety.org.