

CPDC-2018

CPDC-2018 Full Proposal Invitations			
Proposal No.	Investigator	Organization	Title
18-028C	Albrecht, Ute	University of Florida	Comparison of field performance of citrus trees on rootstocks propagated by seedlings, cuttings, and tissue culture
18-029C	Albrecht, Ute	University of Florida	Evaluation of citrus rootstock response to HLB in large-scale existing field trials using conventional and automated procedures
18-030C	Albrigo, L. Gene	University of Florida	Asian citrus psyllid and CLAs reductions from sprays timed on predicted phenology of spring and summer flushes in citrus
18-031C	Alferez, Fernando	University of Florida	Improving seed production and availability of major citrus rootstocks by determining seed viability during maturation and storage
18-032C	Alferez, Fernando	University of Florida	Preventing young trees from psyllids and infection with CLAs through use of protective netting
18-033C	Ampatzidis, Yiannis	University of Florida	Automated root mapping to enhance field trial evaluation of citrus rootstocks in the HLB era
18-034C	Dewdney, M.	University of Florida	Improved postbloom fruit drop management and exploring PFD spread in Florida
18-035C	Dhingra, Amit	Phytelligence Inc	Establishment of MultiPHYTM process for HLB-tolerant citrus rootstocks and comparison with conventional plant materials
18-036C	Duncan, Larry	University of Florida	Cover crops and nematicides: comprehensive nematode IPM across the grove landscape
18-037C	Ferrarezi, Rhuanito / Cave, Ronald	University of Florida	Assessing performance of new grapefruit scions and UFR rootstocks on grapefruit, navel and mandarin in the Indian River District
18-038C	Fischer, Brian	MGF Scientific	Trunk Injection Methods and Active Ingredient Rates Utilizing Oxytetracycline Hydrochloride 39.6% for Commercial Citrus Use

18-039C	Grosser, Jude W.	University of Florida	Part B - The UF/CREC Citrus Improvement Program's Field Trial Evaluations (Complementary to Part A - The UF/CREC Core Citrus Improvement Program, being submitted as an RMC proposal).
18-040C	He, Zhenli	University of Florida	Evaluation of the spatiotemporal dynamics of bactericides within the citrus tree via different application methods
18-041C	Johnson, Evan	University of Florida	Characterizing HLB-pH interaction to improve management of root function and tree health
18-042C	Kadyampakeni, Davie	University of Florida	Development of Root Nutrient and Fertilization Guidelines for Huanglongbing (HLB)-Affected Orange and Grapefruit
18-043C	Kadyampakeni, Davie	University of Florida	Nutrient and Asian citrus psyllid management for improving young citrus tree health and productivity
18-044C	Kadyampakeni, Davie	University of Florida	Optimizing macro- and micro-nutrient nutritional programs to control HLB in Florida
18-045C	Kadyampakeni, Davie	University of Florida	Optimizing water and soil quality for sustaining HLB tolerance, tree longevity, root health, yield and fruit quality
18-046C	Killiny, Nabil	University of Florida	"Screening and development of some novel microbial extracellular metabolites (MEMs)-based bactericide to combat the Huanglongbing disease"
18-047C	Killiny, Nabil	University of Florida	Fighting fire with fire: Vector repellency and interference with bacterial growth using citrus volatiles to control citrus greening
18-048C	Levy, Amit	University of Florida	Field evaluation of citrus tristeza virus decline and HLB in reset trees on sour orange rootstocks
18-049C	Niedz, Randall P.	USDA	The effect of dissolved oxygen in irrigation water on the health of HLB-infected citrus trees.
18-050C	Niedz, Randall P.	USDA	The effect of the ionization state of iron and citric acid on the health of HLB-infected trees.
18-051C	Pelz-Stelinski, Kirsten	University of Florida	Improving bactericide therapy for young tree protection and inoculum reduction

18-052C	Qureshi, Jawwad	University of Florida	Sustainable Management of Asian citrus psyllid (ACP) and Citrus Production
18-053C	Rajaraman, Swaminathan	University of Central Florida	Innovative minimally-invasive, cost-effective, microneedle device for direct delivery of bactericide to phloem of HLB affected citrus trees
18-054C	Shatters, Robert G.	USDA	Evaluation of Tank Mix Effect on Systemic Uptake of Streptomycin and Oxytetracycline
18-055C	Stansly, Phil	University of Florida	Optimizing Benefits of UV Reflective Mulch in Solid Block Citrus Plantings
18-056C	Stelinski, Lukasz	University of Florida	Functional IPM for Asian citrus psyllid under circumstances of chronic HLB
18-057C	Stelinski, Lukasz	University of Florida	Toward implementation of attract-and-kill device for management of Asian citrus psyllids
18-058C	Stover, Ed	USDA	Fort Pierce Field Test Site for Validating HLB and/or ACP Resistance
18-059C	Strauss, Sarah	University of Florida	Citrus row middle management to improve soil and root health
18-060C	Vashisth, Tripti	University of Florida	Developing Fruit Drop Management Strategies to yield of HLB-affected trees
18-061C	Vashisth, Tripti	University of Florida	Evaluating sustainability of yield and fruit quality of sweet oranges with use of controlled release fertilizer and micronutrients
18-062C	Vincent, Christopher	University of Florida	Create tools that detect and predict flush to improve ACP management
18-063C	Vincent, Christopher	University of Florida	Psyllid management through summer flush manipulation
18-064C	Wang, Nian	University of Florida	Evaluation of the control effect of bactericides against citrus Huanglongbing via trunk injection

2018 Full Proposal Submission Invitations: Service & Support Projects

Proposal No.	Principal Investigator	Institution/ Organization	Project Title
18-065C	Hall, David	USDA	High-Throughput Inoculation of Transgenic Citrus for HLB Resistance
18-066C	Orbovic, Vladimir	University of Florida	Support role of the Citrus Core Transformation Facility remains crucial for research leading to production of Citrus plants that may be tolerant or resistant to diseases.
18-067C	Zale, Janice	University of Florida	Continued Funding for the Mature Citrus Facility to Produce Disease Tolerant, Transgenic Citrus.

INVITED FULL PROPOSAL SUBMISSION

Full proposals are due on July 20, 2018 by 5:00 pm EDT. Only complete, invited full proposals will be accepted for funding consideration.

CONTENT AND FORM OF APPLICATION SUBMISSION:

All documents described below are required.

Three documents comprise the Full Proposal package:

1. The multi-page Full Proposal Cover Page and Budget (From [CB-18](#))
2. Project Narrative Document (up to 15 pages) plus appendices
3. Subcontract Budget (Form [SC-18](#)) (complete if applicable, using a separate form for each proposed subcontract).

COVER PAGE AND CB-18 INSTRUCTIONS:

Complete the fields on the first page of the Full Proposal Cover Page.

Biohazard Regulation/DNA: If you are working with regulated agents or materials, and have an approved IBC plan, check “Yes” to indicate you are in compliance with their guidelines. Otherwise, check “No”.

Today’s Date: Enter the date on which you complete and submit your proposal.

Project Title: Enter a clear and concise title for your project.

Principal Investigator: Enter a single point-of-contact for the Principal Investigator (PI) that will be heading the project. List Co-PIs with collaborators.

Project #: As shown on posted list of invited pre-proposals.

Email: Use a valid email address for your point-of-contact. Email will be the primary means of communication within the program.

Phone: Include your phone number, along with country and city codes.

Organization: Enter the name of the organization through which you are working on this project.

Co-PIs and Collaborators: Enter the names and affiliation of your Co-PIs and primary collaborators.

Secondary collaborators may be included here if there is sufficient space. A Co-PI is anyone who has a separate budget under the project, or otherwise has a significant role in completing the proposed work. A

collaborator may provide advice or materials, or receive materials for analysis. Collaborators cannot have a budget in the project, and have no contractual obligation.

Please attach a table (**appendix i**) that lists the Co-PI's and Collaborators, and each of their roles by Objective; this table is not counted in the 15-page limit.

Address: Enter your physical mailing address. This will be a secondary means of contact.

Project Duration (years): Enter the duration of your entire project in years (not greater than 3 years).

Total Funds Requested: (total project) This field is populated automatically from page 2 of Form CB-18. Verify the accuracy of the total funding for your project factoring all years included in Project Duration in \$US. **CRDF does not allow inclusion of indirect costs in project budgets.**

Year 1 Funding Request: This field populates automatically from page 3 of Form CB-18. Verify the accuracy of the Total Direct amount from Page 3 of 5 representing funding you are requesting for the first year of the project in \$US.

Abstract: Summarize your project in up to a 300-word abstract. Include sufficient detail that will allow reviewers to have a clear idea of your project design and anticipated benefits. Be sure to state project objectives in the abstract.

INSTRUCTIONS FOR PROJECT BUDGET FORMS

Budget forms are included within Form CB-18 (pages 2-5), and should be completed and saved at the same time as the Full Proposal Cover (page 1) is completed. Refer to the forms menu on the Funding/Proposal page to download the budget form. Budget forms do not count towards the 15-page limit of the body of the proposal.

Stipends for graduate student involvement in the project should be included as part-time OPS, not staff. In addition, tuition waiver for graduate students is not a personnel expense but, if requested, should be included under "**Other Direct**" costs.

Complete a budget form for each year of the project as designated on Pages 3 to 5. These amounts automatically populate to Page 2, the composite budget form for the entire project period. If applicable, the Subcontract total (line 21) for each year of the project from all Form SC-18's must be manually inserted into pages 3 to 5 of the Project Budget Forms under Subcontracts (line 17 on CB-18). Verify that all amounts are correct, including Subcontractor totals.

When completing entries for personnel to be employed under this project, consider shifting the salary request to the 2nd quarter of the first year of the project if an employee is a new hire. This will more realistically reflect actual employee cost in the first year of the project. Reasonable cost of living increases can be included in personnel entries in the budget and should be described in the budget justification.

Requests for travel expense should consider costs of travel related to conduct the research, as well as reasonable expenses related to presenting project results to peers and stakeholders. Details of proposed travel should be provided in the budget narrative. Do not include purchase of gasoline or vehicle maintenance as travel costs. Instead, include them as Other Direct expense.

Do not leave any fields blank. Be sure to complete all three yearly budget forms, adding zeroes in any years of the form if needed. This will allow the forms to properly function in calculating sums and transferring values to the composite forms.

Budget Justification (narrative): This is a Word file, saved as a PDF and combined with Form CB-18. Provide a brief statement that details the following expense categories:

Personnel: Their role and specific responsibilities in the project. Please be certain to rely on your current institutional fringe rates when calculating personnel costs. Except for PI and Co-PI's, list specific position titles instead of employee names unless the individual is critical to the project. Replacement of personnel listed in this section must be pre-approved by CRDF.

Supplies/Materials: Provide general details of types of supplies and materials that will be utilized for the project and are included in the budget request. This description should demonstrate the need for these expenses to complete the objectives of the proposed research.

Travel: Provide details for in-state and out-of-state travel and purpose of the travel for each trip. Sufficient detail should be provided to assess the value to the project and to CRDF. Include the number of trips, etc. Do not include fuel or maintenance expenses in travel, but move to the **Supplies/Materials** category.

Subcontracts: Summarize the participation of other institutions or entities who will participate in the project and their required budget. (A separate Form SC-18 must be completed and submitted for each entity. Each subcontractor should also complete a budget justification.)

Other Direct: Provide justification of all costs shown.

Equipment: Provide details for equipment with cost in excess of \$500. Define the value of the equipment to completion of the project objectives. A specific quote should accompany this request.

PROJECT NARRATIVE:

This section is subject to a 15-page length limit. Submit this document as a PDF file.

1. Introduction:

- a. Summarize the body of knowledge in the literature or business as it relates specifically to this project.
- b. What is the purpose of this proposed project and how does it address a specific priority or priorities from this RFP?
- c. Describe and cite ongoing or recently completed significant research related to the proposed project including the work of co-PIs and collaborators. Describe how has this project moved beyond a standard research proposal.
- d. Describe preliminary work pertinent to the proposed work. Attach important preliminary data as **appendix ii**, appendices will not count towards the 15-page limit.

2. Objectives:

- a. List specific objectives to be accomplished, including the overall goal of the project and relevance of the project to the CPDC-18 priorities.
- b. Do subsequent objectives rely on the success of a prior objective? If so, how will this affect the project and how will this be managed if an early objective is not met?

3. Project Deliverables:

- a. What products, tools, recommendations, or information will come out of this study?
- b. How and when will the results of this research be communicated to growers?

4. Experimental Approach: Provide a brief description of the project experimental design.

- a. Plant improvement projects refer to the [appendix](#) of this document for requirements.
- b. Research proposals with field trials are required to provide the following information:
 - i. Experimental design: Plot size, layout, treatments, blocks, replications and experimental and sampling unit.
 - ii. Site description including the number of sites and criteria for site(s).
 - iii. Application methodology and timing.

- iv. Data collection: What will be measured, how will it be measured and how often data will be collected.
 - v. Permitting or crop destruction requirements.
5. **Project Timeline:** Timeline of the project with objectives and specific project accomplishments as milestones including subcontractor milestones.

6. Cost/Benefit of Proposed Intervention (if applicable)

7. Regulatory & Commercialization Considerations :

This section is required for all projects developing research concepts, products or tools that are regulated by any state or Federal agency and/or have commercialization needs. Applicants must provide evidence that state and Federal regulations have been considered and a plan has been developed to improve the likelihood of successful regulatory compliance. The pathway to commercialization of products and tools must also be described to give evidence for the feasibility of commercialization. Please provide the following as **appendix iii**, this document will not count towards the 15-page limit.

- a. Describe the regulatory requirements of the concept, product or tool during the research and development stage and for implementation.
- b. Describe how this proposal accounts for regulatory considerations including:
 - i. Acquisition of necessary permits for material movement and trial work
 - ii. SOPs for all pertinent agencies to ensure compliance.
- c. Identify institutional experts, relevant state and federal agencies or regulatory consultants that have been engaged to discuss the regulatory aspect of this research concept.
- d. Describe what will be required to achieve commercialization of project deliverables.
- e. Identify collaborators or consultants that have been engaged with demonstrated expertise in product development and commercialization of this research concept.
- f. Describe intellectual property status including any tools used to develop the product that may affect commercialization.
- g. Describe plans and processes to communicate technology status in reports, presentations and publications without compromising the ability to secure the appropriate patent protection.

Questions regarding regulatory issues may be addressed to aescare@freshfromflorida.com

Commercialization questions should be addressed to institutional offices of technology transfer.

8. Summary of previously CRDF-funded work:

If the proposed project is a follow-up to a previous CRDF-funded project, please provide the following in a 2-page summary as **appendix iv**, which will **not** count towards the 15-page limit: Include only work accomplished by you in a previously funded CRDF project.

- a. Title and CRDF number of previous project
- b. Objectives of previous project
- c. Significant results of previous project, including publications.

Please note that PIs with any current CRDF funding must be up to date on required project reporting including quarterly and annual reports, at time of full proposal review, to be considered for 2018 project funding.

9. Bibliography of Literature Cited in the Project Narrative

10. Additional budget forms and narrative: The project budget forms are attached to the cover page so will precede the project narrative. However, the following additional budget information is requested here; These forms are not included in the 15-page limit.

a. Supplemental: Subcontract Budget (Form [SC-18](#)): If you have co-PI (consultants, professional services or institutions) who will receive funds from your project, complete a separate Form SC-18 for each subcontractor from another entity (the budget of cooperators from your own institution should be included in the main budget). Please include these forms for each year of subcontract and a composite budget form for the entire subcontract period as provided for on Form SC-18. A budget justification (narrative) for the subcontract budget also should be prepared and attached. The total for each year of a subcontract budget form must be entered manually into the subcontract field of the project budget form for each corresponding year. If more than one subcontractor, verify that all are included in the Subcontract Total for each year. The Subcontract total on page 2 of Form CB-18 should calculate automatically. Refer to the application forms menu to download the Subcontract Budget forms. [Download Subcontractor Budget Form](#). **NOTE: While many .pdf forms can usually be combined into one form, each Form SC-18 must be saved as a separate file to avoid fields being overwritten.**

b. Current and Pending Support: This excel spreadsheet follows project budget information and is used by reviewers to provide context (and funding detail) of ongoing research by the PI as well as other pending proposals from the team. The purpose of this form is to provide an overview of funding available to the PIs, and to communicate current and planned research that may be related to that proposed to CRDF. The form should be completed with information for each of the PIs that are contributing to the proposal. Download Current and Pending spreadsheet [Download Personnel Allocations / Current and Pending Support Spreadsheet](#)

c. Personnel Allocation Form: Like the current and pending form, this spreadsheet information is useful to project reviewers and to CRDF to assess level of effort and expertise to meet objectives. Refer to the application form menu to [Personnel Allocation Spreadsheet](#).

11. Appendices:

- i. Table of roles of the Co-PIs and Collaborators
- ii. Preliminary Data (see 1d)
- iii. Regulatory and Commercialization Considerations (see 7)
- iv. Summary of CRDF Funded Projects (see 8)
- v. Brief resumes with only relevant publications are required for all key personnel. It is important to know who will be doing the work, and what their capabilities are. Full CVs are not required. Collaborators should be included in key personnel.
- vi. Institutional Authorization form. This is typically the routing form used by institutions to document review and approval of project proposals prior to their submission. Where available, a copy of the completed institutional authorization form (e.g. UF, IFAS DSR-1) should be included here. All USDA-ARS applicants must submit an approved ARIS form. If your institution does not use such a form, a generic authorization form is provided for your use in the column at the upper left of this page.
- vii. Letter of authorization from each institution for which a Subcontractor Budget form has been completed. This statement allows CRDF to know that subcontractors have agreed, if the project is approved, to complete the objectives with the budget details as provided in the proposal.
- viii. Provide a statement of commitment from each Co-PI and Collaborator's Institution if other than the PI's.
- ix. Other Relevant Information

PROPOSAL LAYOUT DETAILS

Proposals should be written in English and submitted as email attachments in Adobe PDF format. Page margins should be one inch on all sides. Use Times New Roman or a similar typeface set to 12-point and single line spacing. Documents exceeding word or page limits will not be considered.

Page numbers should be placed on the lower right-hand corner with the Principal Investigator name and the page number (e.g., Robins-2).

Each file submitted as a component of your full proposal should be named with the Principal Investigator name and CRDF-assigned project number provided in your email and form identifier (e.g., Robins_18-0##_proposal, Robins_18-0##_CB18, Robins_18-0##_SC18). When naming files to be included in your Full Proposal submission avoid using special characters (! @ # \$ % &) in the filename.

Invited CPDC-2018 Full Proposal Packages should be emailed to cpd@citrusrdf.org.

Questions may be emailed to cpd@citrusrdf.org