

CITRUS RESEARCH AND DEVELOPMENT FOUNDATION, INC.
Minutes of Board of Directors Meeting (corrected)
December 9, 2014

A Meeting of the Board of Directors of the Citrus Research and Development Foundation, Inc. was held on Tuesday, December 9, 2014 at the University of Florida, IFAS, Ben Hill Griffin Hall, Lake Alfred, Florida. The meeting was properly noticed and recorded. The meeting was called to order at 9:30 a.m. by President Tom Jerkins. Roll was called and a quorum was present. Board members present were: Mr. Bobby Barben; Mr. Larry Black; Dr. Lisa Conti (telephone); Mr. Joe L. Davis, Jr.; Dr. Mary Duryea; Mr. Tom Jerkins; Dr. Joe Joyce (telephone); Mr. Ricke Kress; Mr. Jerry Newlin; Mr. Wayne Simmons; Mr. Bob Stambaugh and Mr. Hugh Thompson. Mr. Ben McLean was absent. Also participating: Dr. Harold Browning; Dr. Jim Dukowitz (telephone); Mr. David Howard; Dr. Susan Logue; Mr. Mike Sparks; Dr. Stephanie Slinski; Dr. Jim Syvertsen and Dr. Tom Turpen (telephone).

Also in attendance were: Dr. Tim Anglea; Dr. Tom Bewick; Ms. Michelle Esch; Ms. Sharon Garrett; Ms. Brandi Goller; Mr. Mike Haycock; Ms. Diane Johnson; Mr. Sean McCoy; Dr. Mark McLellan; Mr. Ernie Neff; Mr. Craig Noll; Dr. Mary Lou Polek; Dr. Michael Rogers; Ms. Shelley Rossetter; Ms. Shannon Shepp; Dr. Brian Sully; Ms. Callie Walker; Mr. Mitchell Willis; Dr. Gail Wisler and Ms. Audrey Nowicki.

President Jerkins recognized the members of the NAREEE Citrus Disease Subcommittee in attendance who will meet in the afternoon through Thursday morning to evaluate the status of the 2014 NIFA, SCRI funding cycle and identify priorities for the 2015 call for proposals.

Mr. Kress moved to accept the Minutes of the October 28, 2014 Board of Directors meeting. The motion was seconded by Mr. Davis and passed unanimously.

Finance and Audit Committee: Chairman Hugh Thompson reported that the CRDF audit for FYE June 30, 2014 is available for Board members who would like a hard copy; no changes have been made from what was approved at the last meeting. It was announced that the audit will also be posted to the CRDF website.

Mr. Thompson reviewed details of the October 2014 Financial Summary provided with the meeting materials, noting a cash balance of almost \$2.5 million. Also included was a summary of the NIFA Grant expenditures to date, early in the third year of the five-year project. The first year spending was below projections, and the report showed 83% utilization of the budget in year two. The third year spending is on target through the first quarter.

The nuPssyllid research and management teams, and stakeholder and advisory committees will meet in February 2015 in Orlando prior to the HLB conference to discuss progress toward goals and whether adjustments are needed to the budget or scope of work through the life of the project. With \$7 million unexpended and almost halfway through the project, Mr. Thompson asked if the total funds will be utilized by the end of the project. Dr. Browning responded that they must be utilized within the five-year project period. Adjustments to budgets among project participants may result from discussions at the February nuPssyllid meeting. Staff was reminded that the Board has been waiting for a more detailed report on the progress as well as the budget and asked if it would be available in March. Asked if we will know by the end of project year three whether or not the project goals are feasible, Dr. Turpen reported the project was designed with multiple parallel lines of work and they are seeing viable results in all three approaches, exceeding project expectations. While there likely will not be a psyllid to release at the end of the five

years, it is their intention to get as close as possible, integrating the results of the developmental phase of the project and initiating the release and evaluation phase. Dr. Browning indicated a nuPsyllid Project quarterly report will be compiled and available in January, and noted that the \$9 million project had a requirement for 100% match which has been met by CRDF and CRB funding of HLB projects.

Long Term Research Funding and Legislative Matters: Mr. Sparks noted that the initial request for State Legislative funding in the amount of \$10 million is currently included in the Governor's budget, with \$2 million allocated for the CHRP program and \$8 million targeted to the Foundation that would be available July 1st. The process is proceeding well and once approved, will help take the research to the next level of delivery to growers. The Senate is requesting a presentation on last year's citrus research funding appropriation when it reconvenes in January. In addition to trying to incorporate language giving CRDF flexibility on how the funding will be used, an attempt is being made to allow the funds to meet the greatest needs of CRDF. Mr. Sparks was commended on his efforts working with the legislature.

Governance Committee: Chairman Bob Stambaugh reported that three board members' terms were expiring in December. The Florida Department of Citrus/Citrus Commission recommended re-appointment of Mr. Thompson, and the Florida Citrus Commission recommended the re-appointment of Mr. Jerkins and Mr. Simmons, all of whom have agreed to serve the Foundation for another term. Mr. Stambaugh thanked the reappointed directors for their service to the Board and willingness to continue.

Research Management Committee: Chairman Bobby Barben welcomed Dr. Susan Logue from Tropicana to review the progress with the knowledge mapping project. Dr. Logue reported that 14 researcher participants and a number of observers from the Foundation and commercial companies met October 29th and 30th to discuss the first topic, Control and Eradication of the Bacteria in the Trees. Researchers and experts in the field completed a survey in advance of the meeting which comprised an outline of questions for the team to focus discussion on. The scientists were most cooperative and openly shared their thoughts and findings on the first day, followed by discussion of the barriers and trying to overcome them on the second day.

The results identified a need for: 1) standardization of screening assays; 2) overcoming limited resources for testing standardization, integration of results and transparency, private/public collaborations through forums; and 3) combined thermal and antibiotic therapies, including public and private collaborations. The scientists indicated interest in having more forums, with some groups suggesting monthly progress dialogue. At the same time, the industry needs to understand and implement what is being learned. The Knowledge Mapping planning committee continues to validate the meeting results and expects to have all compiled with a final report for the January 27th Board meeting. Based on a positive response to the trial phase being completed, the planning committee will discuss topics for the next phase with the Board.

Dr. Browning reported on the status of the CATP research portfolio noting at the recommendation of the Board, the major focus is shifting toward short-term solutions. Scientists on longer-term research projects are being directed to national funding sources as the Foundation focuses on delivery of short-term solutions.

Mr. Haycock said the Foundation's role in the past has been to represent and collaborate with all factions of the industry and was hopeful that would continue. Dr. Browning responded that it will be a challenge since the projects funded through MAC or NIFA SCRI require annual reports instead of quarterly, making it

difficult to monitor progress closely. Dr. Bewick noted in the Farm Bill there is a mandate for industry relevancy reviews of projects. Representatives in all facets of the industry are recruited and can volunteer to participate in discussion and ranking of the pre-proposals. After the MAC and SCRI NIFA project selection results are made public, the Foundation can follow the project results. The role of the Foundation may have to be re-defined when the referendum comes up for a vote in the next year or so.

Dr. Browning continued, stating that about half of the current CRDF CATP research portfolio will be maturing by June 30, 2015. Currently, 91 of 107 research projects focus on HLB. Twenty-five product delivery projects are maturing June 30th, with 15 projects approved to continue. While some projects are at the end of their objectives and will cease, others have additional research to continue, raising the question where the support will come from. Drs. Browning and Turpen have been making an initial analysis and review to anticipate which projects are critical and should continue and which may not qualify under the federal funding topics. Since most CRDF research sponsors require bidding and a peer review process, wording for an RFP after the first of the year will be suggested to the Research Management Committee / Board. The list of projects to bring before the Board will be presented at the January Research Management Committee meeting and to the Board as well.

The Foundation also has the option of extending current projects to June 15th in order to bridge to next rounds of available funding. The presentation of specific project lists for further consideration can occur in January if the Board approves the approach. Mr. Kress questioned the ability of the current staff and structure to execute this plan. Dr. Browning explained that the end result would be a smaller portfolio than now, and staff needs would be fine-tuned to coincide with the research and CPD portfolios. Mr. Black indicated that there might be projects we are not aware of today that could come forth from an open call for proposals, which could open possibilities to co-fund with companies. Dr. Browning said it would be better to characterize what kinds of projects we want to fund rather than an open call which could result in hundreds of proposals for which we have limited funding resources. Since the CPDC has the flexibility to consider new projects at any time, researchers can propose projects directed toward solutions outside of this process. The Board agreed that in the next citrus research box tax referendum, the Foundation's role should move towards product development focusing less on research which should be funded by the federal sources. Mr. Kress moved to incorporate Dr. Browning's previous plan during the next few months. Seconded by Mr. Simmons, the motion passed unanimously.

Dr. Turpen reported that the CRDF Project Managers are exploring the database of technologies related to HLB disease control and which companies should be contacted to discuss cooperation.

Dr. Turpen reported that the psyllid shield project proposes psyllid control using RNAi, and the project is developing and validating a mathematical model to predict effects of the use of this strategy. The model suggests that RNAi can help over time by not only reducing psyllid populations by 80-90%, but surviving psyllids may be *CLas* bacteria-free. While discussions have been started with regulatory advisors on the next steps, questions remain on how this technology will be regulated.

Commercial Product Delivery Committee: Vice Chairman David Howard asked Dr. Slinski to lead with a report on antimicrobial project activity.

Dr. Slinski presented an overview of the antimicrobial matrix, reviewing the categories for scoring and ranking of candidate compounds, beginning with efficacy data from the different assays. Some of the other considerations are manufacturing and scale-up, IP barriers, length of time to market a compound, and

acceptance by consumers. The matrix is being populated with all available information for the included candidate materials, and new candidate chemicals will be added as they are identified. The matrix should assist in planning field trials that are expected to be conducted in spring. Board members noted that more weight should be given to ranking the efficacy of a compound, and that it is the desire of the committee to review the matrix and make the recommendation to the Board prior to funding specific actions emerging from the matrix. Dr. Slinski reported intent to develop a whole-plant assay to follow the *L. crescens* lab screen. This assay would be designed to answer several additional questions once *L. crescens* activity is shown. Dr. Slinski will report on the matrix at the January CPDC meeting.

Dr. Slinski reported also that a meeting is scheduled to discuss the Section 18 use of Firewall® on round oranges with the goal to determine timetables and data needs for a 2015 potential petition.

Dr. Slinski reported that NuFarm is developing proposals in support of their field evaluation of antibiotics, which should be presented at the January committee and Board meetings.

Dr. Browning reported on discussion of the three Thermal Therapy projects being funded by MAC. Dr. Syvertsen has developed standard evaluation procedures for thermal treatment trials, and the details were presented as provided in the materials. The committee recommended supporting the project for evaluation in the amount of \$82,456. Mr. Kress moved that the Board approve the requested funding for the evaluation of the thermal therapy field trials. Seconded by Mr. Black, the motion passed unanimously.

Dr. Syvertsen reported on the Plant Growth Regulator projects to study fruit drop noting there were no remarkable results from late 2013 single applications in three of four trials. Significant differences were reported in the Hardee County study with less fruit drop throughout the trial. The committee recommended approval of the proposal to repeat the four trials and authorized up to \$30,000 if all four trials were repeated. Mr. Davis made a motion to repeat the study at all four sites as proposed. Seconded by Mr. Black, the motion passed unanimously.

Dr. Syvertsen reported that Dr. Albrigo will present results and interpretation of PGR trials at the January CPDC meeting.

Dr. Browning reported on the proposed registration of SIVANTO® insecticide, indicating that the State of Florida will need to approve Florida use of this material. FDACS is prepared to review and act on this proposal once a decision comes from EPA.

Dr. Browning reported on the efforts to seek grower cooperators for the tolerant rootstocks field trials resulted in four letters of interest from growers who qualified, participate in CHMA's, have aggressive management plans and a history of field research cooperation. The Foundation will provide the trees and assistance with data collection in these trials for which details are outlined on the citrusrdf.org web site. Two candidates offered sites in the Ridge area and three candidates offered sites in the Southwest flatwoods area. The Indian River area was not represented since grower focus is more on grapefruit, but with such a difference in the soil on the east coast, this trial is vital to the study. Discussion followed for the Board to follow through with the selection of a cooperator in the Ridge and Southwest sites. All of the potential cooperators who provided letters of interest are well qualified as determined by aggressive HLB management, participation in CHMA programs, engaged already in new plantings, and a history of

cooperation in field trials. The Board agreed the best way to fairly select the cooperator sites was by lottery. From the Ridge cooperators, Peace River Packing was drawn, and from the Southwest Region, A. Duda and Sons was drawn.

Mr. Davis moved to approve Peace River Packing and A. Duda and Sons for the Ridge and Southwest field trials of tolerant rootstocks respectively. Seconded by Mr. Kress, the motion passed unanimously.

Industry Research Coordinating Committee: Chairman Wayne Simmons had nothing to report.

COO Report: Dr. Browning introduced Dr. Mark McLellan, former member of the Foundation Board and former Dean of Research at UF, IFAS, who now serves as the Vice-President of Research and Dean of Graduate Studies at Utah State University. Vice-President McLellan will participate as the NAREEEAB Board advisor in the Citrus Disease Subcommittee meetings this week. Dr. Michael Rogers was also acknowledged, as he has been named interim Center Director at UF-IFAS-CREC.

New Business:

Future CRDF Meetings:

- Board of Directors Annual Meeting – January 27, 2015

With no further business, the meeting was adjourned at 11:55 a.m.

Minutes submitted by Jerry Newlin