

# **CITRUS RESEARCH AND DEVELOPMENT FOUNDATION, INC.**

## **Minutes of the Board of Directors Meeting**

**Tuesday, December 8, 2020**

A teleconference meeting of the Board of Directors of the Citrus Research and Development Foundation, Inc. was held on Tuesday, December 8, 2020. The meeting was properly noticed and recorded. Board President David Howard called the meeting to order at 9:03 am. Roll was called, and a quorum was present. Board members present were Rob Atchley, Larry Black, Ned Hancock, Aaron Himrod, David Howard, Ron Mahan, Jeanna Mastrodicasa, Pat Ouimet, and Josh Snively and John Updike. Also participating were Rick Dantzler, Bill Dawson, Steve Futch, Jim Graham, Audrey Nowicki, Brandon Page, Jim Syvertsen, and Deidra Whatley.

Other participants were Mike Aerts, Manjul Dutt, Gary England, Rhuanito Ferrarezi, Fred Gmitter, Catherine Hatcher, Roger Ingley, Matt Joyner, Michelle Leslie, Andrew Meadows, Ernie Neff, and Vladimir Orbovic, Mark Ritenour, Stacie Schumer, Sal Tropea, Callie Walker, Rosa Walsh, and Janice Zale.

Mr. Howard opened with the approval of the October 27, 2020 minutes. Ron Mahan moved to approve the minutes of the October 27<sup>th</sup> Board meeting. The motion was seconded by Josh Snively and it passed unanimously.

**Finance and Audit Committee:** Chairman Ron Mahan reviewed the October-November Financial Statement and Summary, noting that there had not been significant change from the prior statement. Mr. Mahan moved to accept the Financial Statements as presented. The motion was seconded by Mr. Atchley and, with no discussion, the motion passed unanimously.

Mr. Roger Ingley and Sal Tropea from Bunting, Tripp, and Ingley were introduced and were available for any questions pertaining to CRDF's Form 990 prior to submission. It was noted there was a question during the Finance and Audit Committee meeting regarding whether CRDF received co-funding from The Coca-Cola Company in FY 2019-2020; it was confirmed that their co-funding had been made during the previous fiscal year. Mr. Mahan moved to accept the Form 990 as it was presented. The motion was seconded by Mr. Snively and, with no discussion, passed unanimously. Mr. Ingley and Mr. Tropea excused themselves from the meeting.

Mr. Howard asked Matt Joyner, Florida Citrus Mutual, to report on the State budgetary holdbacks directed for FY2021. Mr. Joyner stated that the holdback directed was 8.5% across all the agencies. The issue of the holdback extending to the Box Tax is an issue to be taken up when the legislature reconvenes.

**Executive Committee:** Mr. Howard reported that the Executive Committee met on November 23, 2020. Mr. Dantzler reported on the third amendment to the Bayer contract, which provided for multi-year funding through the NIFA award that was effective September 1, 2020. The Executive Committee approved the amendment which was fully executed prior to the Board meeting to initiate draws under

the award. Mr. Dantzler noted at the December 4<sup>th</sup> meeting of the Bayer Oversight Committee, it was reported that the team was enthusiastic about a new metabolomic component which had been added to the project. He also noted that the Executive Committee approved Mr. Black's continuing participation as a Grower on the Bayer Oversight Committee even though his Board term ends December 31, 2020.

Mr. Dantzler reported on the Bayer project co-funding status, noting that there were overpayments to CRDF due to the timing of the notification of the NIFA funding, and any overpayments are being refunded.

The Executive Committee recommended the payment to Florida Citrus Mutual in the amount of \$3,000.00 for preparation and advertising of the co-sponsored Peptide Seminar.

Mr. Dantzler reported discussions with Dr. Catherine Hatcher regarding PepsiCo's interest in funding CRDF research, noting their restrictions that the funds must be for a specific project. Dr. Hatcher, on behalf of PepsiCo, made a request to receive the raw data from previous CRDF Field Trials. PepsiCo originally offered payment for the data but the Committee discussed not accepting payment but instead releasing the data to PepsiCo, with the contingencies of a confidentiality contract and PepsiCo releasing their analysis of the data. Mr. Mahan moved to approve the agreement with PepsiCo and execute contract. The motion was seconded by Mr. Hancock and, with brief discussion, the motion passed with one abstention by Dr. Ouimet.

The final matter discussed by the Executive Committee was the CRAFT contract. There was discussion of the CRAFT funding being subjected to the 8.5% holdback, noting the decision should be driven by the volume of meritorious projects presented. CRAFT requested that the contract language be revised to provide for payment to CRAFT upon execution of contracts with growers and extending the deadline for planting until December 31, 2021. The committee felt that the December 31<sup>st</sup> deadline was too late and that a date of December 20<sup>th</sup> would suffice. After discussion, Mr. Atchley moved to approve funding the Large Scale Field Trials to CRAFT up to \$3,000,000.00, with the contingency of participation of meritorious projects. The motion was seconded by Mr. Mahan and, with no discussion, the motion passed with one abstention by Dr. Ouimet.

Mr. Howard entertained a motion on the contract language regarding deadline for the planting of trees. Mr. Mahan moved to extend the deadline to have all trees planted to December 20<sup>th</sup>. The motion was seconded by Dr. Mastrodicasa and, with no discussion, the motion passed with Dr. Ouimet abstaining.

**Governance Committee:** Chairman Larry Black stated the Governance Committee had not met.

**Research Management Committee:** Dr. Ouimet reported on the RMC meeting held had November 19, 2020. Dr. Evan Johnson submitted a revised Roots proposal, #20-004, with a budget decrease of 21%. Following Dr. Syvertsen's outline of the revisions that had been requested on the project, Dr. Ouimet moved to approve Dr. Johnson's proposal #20-004 for funding. The motion was seconded by Mr. Snively and passed unanimously.

Dr. Ouimet presented Dr. Manjul Dutt's project #18-007, "Investigating the role of transgenic rootstock-mediated protection of non-transgenic scion" for discussion of progress and continuation funding. Dr. Dutt's project was directed to come back to the Committee for evaluation of progress and consideration of continued funding the remainder of year two and year three of his project. CRDF Staff reported on the scientific progress on the objectives for the project, as well as recommendations made by the Committee. Dr. Dutt's total funding request was \$94,000.00. Dr. Ouimet moved to recommend funding the balance of project #18-007. Mr. Mahan seconded the motion, and with no discussion, the motion passed unanimously.

The final project RMC considered was M. Dutt's off-cycle proposal #20-014, "Understanding the role of systemic acquired resistance (SAR) in enhancing tolerance to HLB in the Parson Brown sweet orange", which he had been requested to submit. Dr. Ouimet noted that Dr. Dawson gave a scientific synopsis of the proposal and the objectives of the project. She also mentioned the discussion of old and new lines of clones from the original budwood and how it was determined which was which by sequencing and possible tagging method. Dr. Ouimet offered for PepsiCo, through Corteva, to pay for the sequencing of the genome for Parsons Brown and make it public to the industry to ensure a specific approve funding proposal #20-014, with an improvement on experiment design and focus. Mr. Snively seconded the motion and it passed unanimously.

**Commercial Product Delivery Committee:** Mr. Updike reported the Committee met on November 17, 2020. Dr. Rogers reported on UF's and the transformation labs' progress in achieving the recommendations of the panel report, including transitioning into a self-sustaining business model. Both labs are reducing their third year funding budgets by approximately 60% of their original budgets. As a measure of good faith, UF will subsidize a portion of the two projects as well. Mr. Updike recommended the Board approve funding for year three in the amount of \$53,316 for Project # 18-066C, Dr. Orbovic's Immature Tissue Transformation Lab, and in the amount of \$139,805 for year three for Project #18-067C, Dr. Zale's Mature Tissue Transformation Lab, for a total of \$193,121, realizing a savings of \$289,682.00 from the original year three budgets on these two projects. The motion was seconded by Mr. Atchley and, after discussion, the motion passed unanimously.

Mr. Updike reported that at the September CPDC meeting, Dr. David Gang's biofilm culturing proposal was tabled with the recommendation to convene a blue-ribbon panel to discuss current research and progress on culturing *CLas*, which was held on November 5<sup>th</sup> when Dr. Jim Syvertsen moderated a virtual discussion by a panel of scientists to discuss the progress each has made in culturing *CLas* and identify knowledge gaps. The participating researchers agreed to collaborate in their efforts and work on a joint proposal for culturing the *CLas* biofilm. In the days following the panel discussion, Dr. Dean Gabriel, a member of the panel, submitted an additional off-cycle proposal for his individual efforts on culturing. The Committee moved to again table Dr. Gang's individual proposal that was originally being considered until a more definitive plan for a collaborative effort between the researchers could be determined.

Mr. Updike reported that CRDF received one response from CRAFT to the Large-Scale Field Trial RFP, requesting \$3,000,000.00, the amount outlined in the Legislative proviso language. Funding for the CRAFT proposal was approved by the Executive Committee as reported earlier in the meeting.

CRDF Staff presented a number of off-cycle proposals to the CPD Committee for consideration. The first was proposal #20-013 from Dr. Ute Albrecht, for “Control and Suppression of *Candidatus liberibacter asiaticus* in citrus trees by trunk injections of a novel anti-bacterial compound”. Dr. Graham summarized the SAB reviews and staff analyses of Dr. Albrecht’s off-cycle proposal and responded to questions raised by the Committee. Mr. Updike reported the CPDC moved to decline the advancement of this project for funding.

Dr. Futch presented on continuation of project #19-020 from Dr. Mark Ritenour regarding use of the fruit sorting equipment funded by CRDF. Dr. Futch and Mr. Dantzler reviewed Dr. Ritenour’s request for continued funding to utilize the equipment. While the CPDC felt there may be some merit to the use, overall, the budget was excessive, and the project was off course from the proof of concept previously approved. After discussion, Mr. Updike stated the CPD Committee’s recommendation to the Board was that Dr. Ritenour’s continuation proposal not be funded.

Next, the Committee heard Dr. Jim Syvertsen’s summary of Dr. David Gang’s project, #20-009C, “Optimization of psyllid-based *CLas* in vitro biofilm cultures and their use in testing Koch’s postulates via psyllid transmission”. The Committee moved to again table Dr. Gang’s individual proposal that was originally being considered until a more definitive plan for a collaborative effort on culturing between the researchers could be determined.

The committee heard Dr. Dawson’s summary of the off-cycle proposal submitted by Elemental Enzymes regarding “Vismax™: A novel peptide-based therapeutic for mitigation of citrus diseases, including HLB”, Peptide treatment for HLB and other citrus related diseases.” He discussed their objectives, and noted the proposal utilizes a UF-IFAS researcher - Dr. Evan Johnson - to perform greenhouse analysis using the spray application of the peptide. The committee felt the \$823,000 budget for the entire project was not feasible; Mr. Updike moved to fund the greenhouse study portion included as a subcontract to Dr. Evan Johnson in the proposal in the amount of \$61,200. Dr. Ouimet seconded the motion and, after brief discussion, the motion passed unanimously.

Dr. Syvertsen presented Dr. Limayem’s preproposal and the Staff Analysis of the proposed project, “A Targeting-Nanotherapeutic Design Toward the Eradication of Citrus Greening Disease Originating from *Candidatus Liberibacter Infection*” – an antimicrobial treatment for HLB. The Committee identified a few major components which would cause roadblocks in the study, as well as the excessive budget of \$264,000. Staff was directed to inform Dr. Limayem of the discussions for response and potential revisions for a preproposal that might be considered in the future. Mr. Updike noted that the preproposal is not advancing to the Board for consideration as it failed at the Committee level for lack of motion.

Mr. Updike reported the final off-cycle preproposal presented to the committee for discussion was from Matthew Machata of Chemhedge, LLC. Dr. Steve Futch presented on this preproposal that had just been received requesting for \$500,000 for a 3-year study on a patented hedger that has been converted into a sprayer applicator, a concept that has been used on the East Coast. The Committee did not act on this preproposal since they did not have time to fully vet the concept. CPD Committee recommended requested that Staff ask Chemhedge refine the proposal and the proof of concept, as well as negotiate the budget. A full proposal may be entertained at a later date.

**Select Committee on Plant Improvement:** Mr. Dantzler gave a synopsis of the December 2, 2020 meeting of the Select Committee on Plant Improvement. Staff provided a list of ten recommended rootstocks for the Committee's consideration, nine of which the Committee chose to advance. Additional domestic or international rootstocks could be added in the future as data comes available for the Committee's consideration. He discussed the difficulties encountered in procuring rootstocks from overseas. The Select Committee formed a Subcommittee to further define the phases of the plant breeding pipeline as one of their first tasks. The Subcommittee membership was established, as well as naming Mike Irely as Chairman.

**Special Presentation:** Dr. Diane Horvath of 2Blades Foundation gave a presentation of the CRDF-funded project and its success in developing a grapefruit cultivar that shows tolerance against citrus canker. Following the presentation, Mr. Dantzler mentioned that CRDF would be expected to respond regarding its position in exercising the intellectual property rights outlined in the agreements on the projects. After discussion regarding the patent phases and expenses associated. Mr. Dantzler noted that, since a definitive deadline was not looming, he would research the subject project and deliverables in greater depth prior to the next board meeting to facilitate a more detailed discussion.

**COO Report:** Mr. Dantzler mentioned Staff was pulling together dates for the 2021 CRDF Board Retreat for January or February 2021.

**Partnerships:** Mike Aerts reported that the petition for the Section 18 for Streptomycin would be going to the EPA and that an answer should be forthcoming by the end of the year.

**Extension Agent Report:** None.

**New Business/Public Comments:** None.

**Future CRDF Meetings:** CRDF Board of Directors Meeting, Tuesday, January 26, 2021 at 9:00 a.m.

With no further business, the meeting adjourned at 11:33 a.m.

Minutes submitted by John Updike, Secretary.