

A meeting of the Board of Directors of the Citrus Research and Development Foundation, Inc. was held on Tuesday, December 12, 2023, at UF-IFAS-CREC, 700 Experiment Station Road, Ben Hill Griffin Jr. Citrus Hall, Room 103, Lake Alfred, FL 33850. The meeting was properly noticed and recorded. Vice-President David Howard called the meeting to order at 10:05 a.m. Roll was called and a quorum was present. Board members present were Rob Atchley, Chris Gunter, George Hamner, Aaron Himrod, David Howard, Deeley Hunt, Ron Mahan, Jeanna Mastrodicasa, Eric Rohrig, Joby Sherrod, Matt Story, and John Updike.

Also participating were Robin Bryant, Rick Dantzler, Bill Dawson, Steve Futch, Jim Graham, Jude Grosser, Weston Johnson, Matt Joyner, Davie Kadyampakeni, Nicholas Kretchman, Matt Machata, Audrey Nowicki, Brandon Page, Amir Rezazadeh, Sarah Spinosa, Jim Syvertsen, Barbara Thompson, and Rosa Walsh.

Vice-President David Howard noted the minutes from the September 26, 2023, Board meeting were available in their packet for review and approval. Mr. Atchley made a motion to accept the minutes as written. The motion was seconded by Mr. Hamner and passed unanimously.

Public Comments: None

Mr. Dantzler recognized the members leaving the Board on December 31, 2023. Engraved notebooks were presented to Rob Atchley, David Howard, and John Updike. They were each given an opportunity to speak. A notebook will also be mailed to Greg Hodges who left the Board last year.

Mr. Dantzler introduced Sarah Spinosa and Matt Machata, new board members, who shared their backgrounds.

Executive Committee: Did not meet.

Finance and Audit Committee: Mr. Mahan presented the November 30, 2023, Financial Summary. Net assets were just under \$1.8 million and cash available was just over \$1.6 million. Accounts Receivable of \$238,000 is our billings for research. Research expenses budgeted to date show a variance of about \$1 million behind projections. Uncommitted funds remain at about \$1.5 million, which would be available for funding new research projects. Mr. Mahan moved that the financial report be accepted as presented. His motion was seconded by Mr. Updike and passed unanimously.

Governance Committee: Mr. Himrod noted that the Governance Committee had met and approved this slate of Officers to present to the Board of Directors for approval: Morgan Porter,

President; Joby Sherrod, Vice President; George Hamner, Secretary; and Ron Mahan, Treasurer. Mr. Himrod moved to recommend this slate for approval by the Board. It was seconded by Mr. Updike and passed unanimously.

Mr. Himrod continued with the selection of Committee Chairpersons. Proposed Chairpersons were Aaron Himrod, Research Management Committee; Joby Sherrod, Plant Improvement Committee; George Hamner, Governance Committee; and Ron Mahan, Finance & Audit. Mr. Himrod moved to recommend this slate for approval by the Board. It was seconded by Mr. Updike and passed unanimously.

Mr. Dantzler talked about the committee memberships and the fact that the CRDF bylaws set a limit of 17 members. Action on this matter was deferred until he has the opportunity to meet with the new Board members and find out where their interests lie. It is recommended that every Board member serve on at least one committee. Right now, Deeley Hunt is not on a committee. Dr. Ouimet stepped down from the RMC which made way for Scott Adkins to be the USDA representative and Brian Scully to remain a member. Dr. Tom Obreza is the UF representative for RMC. Currently, we have 18 members on the Plant Improvement Committee (PIC), which is one more than prescribed in the bylaws, but it was felt that this would work itself out shortly.

Research Management Committee: Mr. Updike presented project #23-031, Accelerate Establishment of Stage 2 Citrus Trials to Combat Citrus Greening Disease. He moved for approval, which was seconded by Mr. Hamner. There was a question of how this would affect CRDF's upcoming scion trials and if there is overlap. The motion passed unanimously.

Mr. Updike made a motion to approve two-year funding of Dr. Chater's Proposal #23-029, *Consideration of citrus breeding plant material to vacate space for Stage 1 and Stage 2 field trials and to explant tolerant germplasm for gene editing strategies.* The motion was seconded by Mr. Hunt and passed unanimously.

Mr. Updike made a motion to approve funding Dr. Chater's drone re-fly and data collection. The motion was seconded by Mr. Hamner and passed unanimously.

Mr. Updike discussed Dr. Mattia's drone re-fly and data collection. Mr. Hamner made a motion to approve Dr. Mattia's funding. The motion was seconded by Mr. Updike and passed unanimously.

Mr. Updike started the discussion of Dr. Carlos Messina's Citrus Transformation Center and research proposal related to the project. Mr. Updike made a motion to approve the research funding of Dr. Messina's proposal 23-031, *Genes, Software, and a Playbook: Combating HLB in Florida Orchards*. The motion was seconded by Dr. Mastrodicasa. Dr. Messina revised his original proposal to include research with deliverables, to include providing five new targets, and creating a playbook to respond to any consumer issues coming forward. The motion passed unanimously.

Mr. Updike described Dr. Duan's proposal 23-028, *Exploring the HLB control potential of a new citrus-infecting virus, NMV-M/CFL, and its expression system,* and moved to approve for discussion purposes. Mr. Hamner seconded the motion. Mr. Dantzler noted that the RMC reviewed this proposal with four objectives. Previously CRDF agreed to fund a limited scope of this research, and in the meantime Dr. Duan decided to apply for federal funding for the project but missed the deadline, so was requesting bridge funding until he could re-apply. Mr. Dantzler met with him to request a revised preproposal on how to keep the project moving. After discussion, the motion was withdrawn until next month to allow Dr. Duan to revise it as requested.

Mr. Updike made a motion to approve the bid from Mr. Yonce for RFP 1: *Phos Acid and Copper* – *Study on injection of labeled plant protection materials,* at a site in Arcadia. The motion was seconded by Mr. Atchley and passed unanimously. It was noted that a second bid was received from Dudley Southerland, who had not yet secured a site for this project. Mr. Hamner questioned the value of performing this trial both in the southwest and on the east coast; Mr. Himrod also felt it was a redundancy. Staff was directed to contact the second bidder and come back with a price to be considered.

Mr. Updike noted that three proposals were submitted under RFP 2: *Testing the injection of OTC in a pH neutral solution*. Mr. Updike made a motion to approve Dr. Albrecht's two-year proposal for RFP 2. The motion was seconded by Dr. Mastrodicasa. There was a question on the cost of the material being provided through a subcontract with Dr. Santra. CRDF would incur these additional costs for the materials and testing if the project was performed by either of the two crop-consultant proposals that were submitted, making Dr. Albrecht's proposal budget competitive. The motion passed unanimously.

Mr. Updike moved to approve funding Dr. Yu Wang's proposal 23-027, *A High-Throughput Screen for natural Antibacterial Agents Against CLas,* proposing testing of up to 100 agents. The approval would incorporate RMC's recommendation that a Pathologist be added and that the list be cross-checked with Dr. Scully and possibly Dr. Mandadi to eliminate redundancy. The motion was seconded by Mr. Atchley and passed unanimously.

Mr. Updike made a motion to approve Dr. Zhonglin Mou's proposal 23-030, *Evaluate new transgenic rootstocks for HLB tolerance*. Mr. Atchley seconded the motion. Mr. Dantzler added that this project received the highest score of those being considered by the Scientific Advisory Board. The motion passed unanimously.

Mr. Updike made a motion to approve one year of funding for Dr. Eric Triplett's proposal 23-032, *Proof of concept for phage therapy in the reduction CLas titer and HLB symptoms in citrus,* for proof of concept. The motion was seconded by Dr. Mastrodicasa. Discussion followed that the

sequencing should be removed from the project and funded separately if the initial therapies are successful, thereby reducing the budget. The motion passed unanimously.

Prior to the next proposal discussion, Mr. Howard handed the control of the meeting to Mr. Atchley. Mr. Updike opened the discussion of Dr. Davie Kadyampakeni's proposal 23-033, Comparing two new nutrition programs utilizing CRF to provide year-round elevated levels of secondary and micronutrients with a selected standard commercial nutrition program. Mr. Dantzler noted that previously Mr. Hancock suggested an \$80,000 budget reduction, and the PI reduced the budget, accordingly, eliminating one of the experimental blends. Mr. Howard made a motion that, instead of approving the proposal as presented, CRDF coordinate with grower-cooperators in the three main citrus producing regions to test the experimental blend against standard fertility regimes, and that researchers be brought in to help with scientific questions. It was a hybrid of the proposal as presented, one that would be more grower driven. Mr. Sherrod seconded the motion. It was suggested that this could be a CRAFT trial, but because the theory was not proven, it did not qualify, so Mr. Updike suggested that a recommendation be made to CRAFT for a change of their rules so this project could be funded by CRAFT. After much discussion on the pros and cons, Mr. Howard retracted his motion. Mr. Hamner then made a motion to send the proposal back to RMC for further consideration. Mr. Howard seconded the motion and it passed unanimously.

The preproposal previously presented by Dr. Mattia and Dr. Chater, *The bright future of citrus breeding, a transformational three-year grand plan for accelerated commercial variety development,* was previously deferred due to overlap with the Coca-Cola trial. RMC would be receiving an updated preproposal, so no action was taken.

Mr. Updike noted the RMC heard presentations on two projects for consideration of year 2 funding:

Mr. Updike made a motion to approve funding of \$113,072 for year 2 of Dr. L. Diepenbrock's project 22-013, *Getting to the root of the problem: Managing Diaprepes root weevil on trees with HLB*. This project will determine what works best. The motion was seconded by Mr. Hamner and passed unanimously.

Mr. Updike noted the recommendation of the RMC was that Dr. Diepenbrock's project 22-014, *Developing management for Bulimulus bonariensis snails in Florida citrus,* be granted a 6-month no-cost extension before considering second year funding.

Mr. Updike made a motion to approve Dr. Diepenbrock's request for year 4 continuation funding of project 20-002C, *Developing near and long-term management strategies for Lebbeck mealybug* (Nipaecoccus viridis) *in Florida citrus*. The budget was \$192,000 to provide bridge funding until

federal funding can be obtained from NIFA. The motion was seconded by Dr. Mastrodicasa and passed unanimously.

Grower Cooperator for Molecules Trial – RMC approved the proposal that Mr. Dantzler presented to compensate grower cooperators for harvesting costs for trees for which fruit must be destroyed. As well, if the trees were killed, the cost to purchase new trees, wraps, and planting costs would be covered. Board members had questions of how much a tree would be reimbursed due to future loss of income and suggested finding calculations from state sources.

COO Report: Mr. Dantzler noted:

- There are two vacancies on the MAC review panel.
- AMVAC Citrus Fix is seeking to change the label on application of its product.
- CRDF's trial used only half of the recommended rate of the PGR Adjuvant in experimental designs. For future trials, companies will be consulted on experimental design.
- The IRCHLB VII bi-annual conference is in California in March; CRDF's sponsorship provides for six registrations.

Partnership Updates:

Florida Citrus Mutual – Mr. Dantzler reported on budget status in Tallahassee.

UF-IFAS – Jeanna Mastrodicasa reported that Center Director candidates for IRREC are being considered. Chris Oswalt thanked CRDF for their sponsorship for the April 9, 2024, Citrus Growers Institute in Avon Park. There was no report from USDA.

New Business: Mr. Dantzler noted that he and Brandon met with Scott Thompson and James Shinn, who were seeking funding for an injection device. A Board member questioned why they did not fund it themselves. Mr. Dantzler had talked to Dr. Vashisth about providing a third-party verification. Since there was no motion put forward, it was noted that the Executive Committee could address it if needed before the next scheduled Board meeting.

Public Comments: None

The next Board of Directors Meeting will be Tuesday, January 23, 2024, at the Hampton Inn & Suites, 22900 Highway 27, Lake Wales, FL 33859.

With no further business, the meeting adjourned at 12:27 p.m.

Minutes submitted by John Updike, Secretary.