

A meeting of the Board of Directors of the Citrus Research and Development Foundation, Inc. was held on Tuesday, September 24, 2024, at the USDA-ARS, 2001 South Rock Road, Fort Pierce, FL 34945. The meeting was properly noticed and recorded. President Morgan Porter called the meeting to order at 10:02 AM.

Ms. Porter opened up the opportunity for public comments from those in attendance. Dr. Scott Adkins, USDA Director - Ft. Pierce, greeted everyone and introduced Dr. Clive Bock from their offices who has a project up for consideration for CRDF funding. Also present was Doug Bournique who expressed gratitude for the progress made and acknowledged the challenges faced, noting that the textbook needs to be put aside and think outside the box. He believed the future is putting trees in the ground, as did Cody Estes. Cody is very active with Dr. Michelle Heck's Grove First initiative. What works in the lab may not work in the field. There are some possibilities coming forth to at least bridge the gap until we have something better.

Roll was called and a quorum was present. Board members present were Chris Gunter, Aaron Himrod, Deeley Hunt, Matt Machata, Jeanna Mastrodicasa, Trevor Murphy, Morgan Porter, Joby Sherrod, Taylor Smith, and Sarah Spinosa.

President Morgan Porter noted the minutes from the July 23, 2024, Board meeting were available in their packet for review and approval. Mr. Sherrod made a motion to accept the minutes as written. The motion was seconded by Mr. Himrod and passed unanimously.

Executive Committee: Did not meet.

Finance and Audit Committee: Ms. Audrey Nowicki gave the financial summary for August 31, 2024. The general cash account was at \$188,189, and the joint account was at \$148,969. There was \$1,414,281 in the investment account. Accounts Receivable was at \$207,216 and Accounts Payable at 321,183 for a total Net Assets of \$1,637,473. A few invoices were being held pending receipt of the progress reports before processing payment. If the CRAFT project is approved during this meeting, that contract will move forward and those funds will be used pretty quickly. Expenses were basically running behind just as they do any other year during this time. Mr. Sherrod made a motion to accept the financial summary as presented. The motion was seconded by Dr. Mastrodicasa and passed unanimously.

Mr. Dantzler noted that at the September 3rd Finance and Audit Committee, Sal Tropea of Bunt, Tripp, & Angley, went through the financial statement and Form 990 in detail, and the Finance and Audit Committee were very satisfied with it. Mr. Tropea noted that the audit went fairly

smoothly. They issued a non-modified report which means that it was a clean audit. CRDF met the threshold to do a State single audit, and there were no findings or questionable costs in that regard. However, before they could submit that to the State or issue the final Audit, the CRDF board would need to approve the final report. Mr. Himrod made a motion to accept the audit report. The motion was seconded by Dr. Mastrodicasa and passed unanimously.

Mr. Dantzler noted that Form 990 would need a separate motion. There was a lot of narrative, and they tried to make sure it was worded correctly. Those narratives were addressed and those changes were included in the copy that the board members had. Mr. Sherrod noted that his name was listed on Form 990, part 6, line 9, for officers who could not be reached. Mr. Tropea stated that this was an oversight; it would be corrected and a new copy sent back to CRDF. Mr. Sherrod made a motion to accept the Form 990 report with the correction made as noted in the discussion. The motion was seconded by Dr. Mastrodicasa and passed unanimously.

Governance Committee: In Mr. Hamner's absence, Mr. Dantzler presented the background to all the changes being recommended to the board for approval. The Governance Committee met on August 19, 2024. They considered changes in Committee Membership for F&A, PIC, and RMC. First up was the addition of Sarah Spinosa and Deeley Hunt to the F&A Committee which currently consisted of Ron Mahan, Chris Gunter, and Matt Story as members. Mr. Sherrod made a motion to accept the new members. It was seconded by Mr. Himrod and passed unanimously.

The PIC suggestions were to add back Gio Ljpkemeule, along with Aaron Corkrum and Sean McCoy who would be replacing Scott Lambeth and Dave Crumbly, respectively. Also, Steven Hall would replace Tamara Wood as the CRAFT ad hoc member. Mr. Sherrod made a motion to accept the new members. It was seconded by Mr. Himrod and passed unanimously.

The RMC would add Bo Meador and Scott Lambeth to replace David Howard and Tom Obreza, IFAS (who recently retired). Mr. Sherrod made a motion to accept the new members. It was seconded by Mr. Machata and passed unanimously.

Next up were the Revisions to Bylaws. First noted was the change to Section 4.03 (f)(1)g: This makes it clear that a board member, even one who served two, three-year terms, may be reappointed to the board after sitting out for one year. It also established that the time spent as an Emeritus member may count towards time off the board for the purpose of reappointment. Mr. Himrod made a motion to accept this change. It was seconded by Mr. Sherrod and passed unanimously.

Section 5.03 states that the Finance & Audit Committee shall have no fewer than three board members. The thought being that if we go to five in practice, by saying no fewer than three would

allow any number above that. Mr. Sherrod made a motion to accept this change. It was seconded by Mr. Machata and passed unanimously.

Section 5.04 states that the membership of the Governance Committee shall be no fewer than three. Since this is the committee that recommends to the board the COO and Office Manager if there is a vacancy, the board may want to have more members on this committee at some point in the future. Mr. Sherrod made a motion to accept this change. It was seconded by Mr. Himrod and passed unanimously.

Section 5.05 (1st paragraph) clarifies that the board has the power to fund a project even if it has not been recommended by a committee, but it does require the board to give appropriate weight to a recommendation. It also requires that CRDF only "endeavor" (not require) to fund peer reviewed, unbiased, un-conflicted third-party advisors. However, it does say that only when circumstances are exigent, or such review is not practicable should CRDF stray from the practice. This would come into play if there came a time when speed needed to drive a decision more than unbiased review. Mr. Sherrod made a motion to accept this change. It was seconded by Mr. Himrod and passed unanimously.

Section 5.05 (2nd paragraph) is the change of RMC from 17 to 21 members and the change from three (to four) of the committee members being Board members. CRDF has already adopted this, but it has not been submitted to Gainesville. The new change removes the term limits provision for RMC members. The 3rd paragraph states that chairs of subcommittees, if created, do not have to be board members. Mr. Sherrod made a motion to accept this change. It was seconded by Dr. Mastrodicasa and passed unanimously. Mr. Sherrod noted that we needed to work harder on attending meetings in person or at least via Zoom, since there have been problems with getting and keeping a quorum.

Section 5.06 makes PIC responsible for evaluating germplasm for placement in the plant breeding pipeline and recommending advancement of germplasm to last-stage field trials or mass propagation and commenting on plant improvement projections dealing primarily with breeding or where the input of more industry representatives would be particularly helpful. This also removes the term limits for PIC members. Mr. Sherrod made a motion to accept this change dropping the word "conventional." It was seconded by Mr. Machata and passed unanimously.

Mr. Dantzler reported that the Corporate Resolution was no longer relevant and had been revised to reflect the current CRDF makeup. Mr. Sherrod made a motion to accept this change. It was seconded by Dr. Mastrodicasa and passed unanimously.

On the subject of the Conflict-of-Interest forms, it was noted that the Governance Committee reviewed those forms that were turned in at that time and concluded that any potential conflict had been disclosed. Barbara Thompson will send out reminders to those that have not yet submitted.

Mr. Dantzler also noted that there were three board members whose terms will expire December 31: George Hamner. Deeley Hunt, and Joby Sherrod. He would reach out to them and make sure they are willing to continue serving. Renominations would be sent out by Dr. Mastrodicasa and Shannon Shepp.

Research Management Committee: Mr. Dantzler noted that \$681,000 would remain in the budget if the board approved the four projects being recommended by RMC plus one that is to revise and submit. Mr. Himrod noted that RMC met in Arcadia on September 10th.

24-001 – F. Alferez – "Integrating novel copper formulations with brassinosteroids for citrus canker management" was recommended by RMC with three no votes. Mr. Himrod made a motion to approve funding. It was seconded by Dr. Mastrodicasa and passed unanimously.

24-002 – F. Alferez – "Integrating a plant defense inducer to alleviate associated adverse effects of OTC therapy and overcome the "off" third year" was not recommended by RMC mainly due to the third-year problem going away. The project died from lack of a motion from the board.

24-003 – O. Batuman – "Exploring plant defense inducers as complementary strategies to copper application for controlling citrus canker and enhancing citrus greening mgmt in FL citrus groves." The plant defense inducer PDI-7 has shown efficacy in citrus and other crops but is still undergoing toxicology testing. There was discussion on whether Bayer should be picking up the research costs from this point forward since they were to be seeking commercialization of the product. It was noted that since CRDF had already invested so heavily into the Bayer project thus far, we should fund this so that we would have the findings and Bayer would be able to move forward with commercialization. Ms. Porter noted that if CRDF funds this project and finds the most effective application method, then Bayer can pursue that on the first-time label and not have to revise it later. She made a motion to approve funding with the different application methods including injection, soil drench, and spray. It was seconded by Mr. Sherrod and passed unanimously.

24-004 – O. Batuman – "Evaluation of the breakdown curve of OTC in the plant for control of HLB in the field." Mr. Himrod noted that with a modest amount of discussion, this project received unanimous approval to fund with the caveat that specific environmental factors of temperature and light intensity were recorded providing a set of guidelines. Mr. Himrod brought this forward as a motion. It was seconded by Mr. Machata and passed unanimously.

24-005 – S. Santra – "Protecting trees using nano-GRAS IPM strategy" Mr. Himrod noted that RMC voted to have Dr. Santra revise and resubmit without the OTC component. He brought this forward as a motion. It was seconded by Dr. Mastrodicasa and passed unanimously.

24-007 – S. Strauss – "Short- and long-term assessment of bark, root, and rhizosphere microbiomes and antibiotic resistance genes of oxytetracycline-injected citrus trees." Mr. Himrod noted that there was not any real interest in funding this project. The work is required to be done by the registrants to maintain the registration of the labels. Mr. Sherrod asked if this project applied to the RFP. Mr. Dantzler noted that Dr. Strauss stated that this project applies to number 8 of the RFP. Mr. Himrod asked for Dr. Graham's input as the project manager. Dr. Graham did not see a benefit from this project.

24-009 – C. Vincent – "Injury-Free Root Delivery Device for Therapeutics in Young Trees." Mr. Himrod noted that this project received a lot of interest from the RMC. The central thesis is that we can use devices in the root zone that really encourage root proliferation, and with those devices apply things like OTC or other antimicrobials to be picked up by the trees from the roots themselves rather than having to run through and do trunk injections. The thought is that we can perhaps lessen our cost of application of antimicrobials, as well as not have any injury as a result of injection. RMC approved this with one no vote. Mr. Dantzler noted that CREC has recently purchased a 3D printer, and Dr. Vincent would be able to utilize it; thus taking \$10,600 off of his budget. Mr. Himrod made a motion to approve funding. It was seconded by Dr. Mastrodicasa and passed unanimously.

24-012 – J. Qureshi – "Abatement of Asian citrus psyllid and HLB through treatments of OTC and systemic insecticides" Mr. Himrod noted that there was no interest from RMC. The project as presented had pretty much already been done. The project died from lack of a motion from the board.

Directed Research Proposal 24-010 – C. Bock – "Citrus black spot – what is the risk of dispersal of inoculum in FL in relation to current quarantine measures?" Mr. Himrod noted that this gave options for growers to not have to do production practices that they are doing now. RMC voted unanimously to approve funding, so he brought this forward as a motion. It was seconded by Mr. Machata and passed unanimously.

Off-Cycle Consideration of M. Dutt Preproposal – "Rapid production of non-transgenic genome edited citrus plants" Preproposal for Invitation of Full Proposal. Even though Dr. Nian Wang is working with CRISPR in this regard, Dr. Dutt would like to provide a second lab using CRISPR with the protoplast technology. Mr. Himrod made a motion to invite a full proposal. It was seconded by Dr. Mastrodicasa and passed unanimously.

Consideration of CRAFT proposal received in response to RFP for Large-Scale Field Trials. Mr. Himrod noted that this was unanimously approved by RMC and brought this forth as a motion to approve funding. It was seconded by Dr. Mastrodicasa and passed unanimously.

Continuation Funding:

M. Mattia – Project 21-025 – "Transgenic capable field site to assess HLB-resistant and other improved citrus" Mr. Dantzler noted that they were current on their quarterly reports. Mr. Himrod brought forth the motion from RMC to approve 3rd-year funding. It was seconded by Mr. Sherrod and passed unanimously.

K. Mandadi – Project 23-018 – "Truck injection-based evaluation of novel anti-CLas chemistries and OTC combinations for Florida citrus and HLB disease management". Mr. Himrod brought forth the motion from RMC to approve 2nd-year funding. It was seconded by Mr. Sherrod and passed unanimously.

Plant Improvement Committee: Did not meet.

COO Report: Mr. Dantzler reported that Invaio let their Florida workforce go and was putting more of its investment into Brazil. However, Dave Gerard told him that they were just suspending development of new products – not entirely walking away. Dr. Michelle Heck was not funded federally for her Grove First project, so she may be seeking funding in the future when her current funding is depleted. ARS is getting ready to make a significant commitment in trying to bring a symbiont to the Florida citrus industry within 3 years, and they would like for CRDF to participate. Also, the Silvec technologies CTV vectoring project did not receive federal funding. He has been speaking with Raphael Simon from Silvec. They acquired the intellectual property rights to this technology from Southern Gardens. They believe they are one year away from getting the 1st generation approved by EPA. IR-4 is handling that.

During the RMC meeting, Wayne Simmons suggested that there be another transgenic workshop where all of the transgenic breeders put everything they have on the table and explain to the industry what has been planted, and exactly what the timelines are going to be, and thought that CRDF should be involved in helping to pull that together. We could work with FCM, Dr. Michael Rogers, and the other Center Directors to make sure that we are hitting the mark. FCM usually charges \$2,500 for communications, etc. So, we may be asked to spend up to \$5,000. Ms. Porter asked if there could be an in-person option for those that are more able to grasp everything and remain engaged in person.

Fritz Roka contacted CRDF to see about contacting our grower list for his survey on OTC and was directed to speak with Matt Joyner. CRDF may be asked to help finance some of those costs.

Regarding our budget from Tallahassee, we considered instead of asking for a lump sum to break it down by subject matter and prepare a letter outlining research strategies, but Mr. Joyner did not think that was necessary.

Partnership Updates: Mr. Steven Hall from CRAFT reported that their application window was open through November 1st. He encouraged growers to apply. He reported that less than 10% of their applicants withdrew from the program. They currently have over \$10 million of potential applications if everything was funded. They are still looking for solid set PEP program which compensates the growers up to \$6,000 per acre. They have five different varieties. They are engaging a group to analyze their five years of data.

Dr. Mastrodicasa noted that she had been dealing with the two days of new faculty orientation and professional development. Dr. Mark Kistler, the new Center Director from Indian River, was in Gainesville for that program.

FCM's main update was the October 11th crop estimate lunch at the Putnam Ranch at 11:30 AM.

The next Board of Directors meeting will be held October 22, 2024, if necessary.

With no further business, the meeting adjourned at 12:00 PM.

Minutes submitted by George Hamner, Secretary.