

CITRUS RESEARCH AND DEVELOPMENT FOUNDATION, INC.

Minutes of the Board of Directors Meeting

Tuesday, September 24, 2019

A meeting of the Board of Directors of the Citrus Research and Development Foundation, Inc. was held on Tuesday, September 24, 2019 at the UF-IFAS Citrus Research and Education Center, Ben Hill Griffin Hall, in Lake Alfred, Florida. The meeting was properly noticed and recorded. Board President Larry Black called the meeting to order at 10:00 am. Roll was called, and a quorum was present. Board members present were Rob Atchley, Bobby Barben, Larry Black, Ned Hancock, Greg Hodges, David Howard (telephone), Charlie Lykes, Jeanna Mastrodicasa, Bob Newson (telephone), Tom Obreza and John Updike. Also participating were Brandy Brown, Rick Dantzler, Steve Futch, Jim Graham, Audrey Nowicki, Michael Rogers, Arnold Schumann, Mike Sparks and Jim Syvertsen.

Also in attendance were Ute Albrecht (telephone), Heather Anderson (telephone), Kenneth Brown, Ed Dickinson, Tim Eyrich, Fred Gmitter (telephone), Cody Lastinger, Sean McCoy, Brandon Page, Sarah Strauss (telephone), Rosa Walsh (telephone) and Callie Walker.

Mr. Black presented the board minutes from the August 27, 2019 board meeting. Mr. Hancock moved to accept the minutes of the August 27, 2019 Board of Directors meeting. The motion was seconded by Mr. Updike, and with no discussion it passed unanimously.

Executive Committee: Chairman Larry Black thanked Ms. Brown for her work for CRDF and wished her luck in her new endeavor. Mr. Black also thanked Mr. Lykes for his service to the Board and noted that Florida Citrus Mutual's appointee, Ron Mahan, will replace him at the next meeting. Two additional appointees are expected from FDOC, to fill Mr. Newlin's current vacancy and Mr. Barben's term that will end in December.

Finance and Audit Committee: Chairman Ned Hancock presented the August Financial Summary, noting the Wells Fargo Money Market account was closed last month, and that the Pepsico co-funding payment for the Bayer project has been received. The FY 2019-20 FDACS contracts are still in Tallahassee for final review before execution. Mr. Black questioned whether expenses are being paid if current year FDACS funds are not yet available; Mr. Hancock responded that invoices are current, utilizing reserve funds in the interim. Mr. Updike made a motion to approve the financial summary as submitted. Mr. Atchley seconded the motion, and, with no discussion, it passed unanimously.

Mr. Hancock noted that, at a recent meeting in Tallahassee, the Legislators indicated their intent to keep next year's budget equal, with no increase.

Governance Committee: Chairman John Updike, Jr. reported the committee did not meet.

Research Management Committee: Chairman David Howard reported the committee met on September 19 to review proposal revisions that had been requested on 19-011 Kadyampakeni, 19-014 Killiny and 19-022 Vashisth.

Mr. Atchley made a motion for Board approval of the nine projects listed in the meeting materials. The motion was seconded by Mr. Barben. Mr. Dantzler summarized the 2019 RFP process, noting that of 91 pre-proposals received, 27 were invited to submit full proposals. At the August 23rd Board of Directors meeting the committee recommended eight proposals for funding and requested revisions on three that dealt with nutrition, requesting they be blended into a single proposal. After discussing with Drs. Morgan and Rogers, it was determined that 19-011 Kadyampakeni should remain a stand-alone proposal; the 19-014 Killiny and 19-022 Vashisth proposals could be combined.

While Dr. Kadyampakeni submitted a revised proposal 19-011, the reduction was achieved by dropping the SW Florida field site. The committee included 19-011 in the project list being recommended for approval and directed the COO to meet with the PI to bring that field site back in and achieve savings elsewhere. With regard to the revised proposal 19-014/19-022, the committee directed the COO to form a working group of scientists and growers to collaborate on specific objectives that will provide answers to specific questions that growers are seeking.

Mr. Black repeated the motion, a recommendation for approval of nine proposals, including 19-011 Kadyampakeni, and directing the COO to review their budgets with each PI, focusing on salaries, tuition and reasonable travel costs. Mr. Atchley asked if there is budget capacity to fund the costs being recommended. Mr. Black read the list of proposals and budgets being recommended and repeated the motion with the caveat that Mr. Dantzler had authority to reduce the budgets as directed. Mr. Hancock questioned approving funding the nutrient proposal 19-011 at this time and not considering it with the other nutrient proposals. He also questioned 19-024 Yu Wang's proposal studying the use of alternative HLB-tolerant cultivars in the context that the processors and consumers may not accept the concept. Mr. Barben recalled that the PI received a recommendation to involve the processors in the project when the pre-proposal was invited. Dr. Futch recalled that the processors were included in that part of the proposal. Mr. Dantzler explained the scope of 19-011 is broader than strictly a nutrition project. Discussions reverted back to the 19-011 Kadyampakeni proposal. Mr. Atchley noted the magnitude of overall funding that project 19-011 would utilize and recommended amending the motion to include approval of eight proposals, and requested staff to make recommendations for additional 19-011 revisions for the RMC to re-visit and make a recommendation at the next board meeting. With no further discussion on the other eight proposals, the motion to approve funding of the eight proposals passed unanimously.

Mr. Black stressed the importance of having a plan and said it was his preference for the RMC to make the decision on the scope of funding for Kadyampakeni 19-011 and the nutrition projects. Mr. Howard clarified the RMC's original recommendation that included funding 19-011 with the contingency that the COO discuss staff and committee recommendations further with the PI, and encouraged board members to attend and voice their concerns when the RMC re-convenes for further discussion.

Mr. Howard made a motion for the Research Management Committee to re-convene to review staff recommendations and further budget reduction by Dr. Kadyampakeni on project 19-011. The motion was seconded by Dr. Hodges. Mr. Black stressed that expediency is essential and the importance of bringing this back for action at the next board meeting. With no further discussion, the motion passed unanimously.

Mr. Howard reported that the RMC made a recommendation and made a motion that the Board direct the COO to put together a working group which combines the components of projects 19-014 Killiny and 19-022 Vashisth regarding nutritional issues. Mr. Updike questioned if the group is limited to those two proposals or will the working group address nutrition. Mr. Howard said project 19-011 Kadyampakeni can be addressed by the group, but the motion is specific to 19-014 and 19-022. Mr. Barben seconded the motion. Mr. Black clarified the motion is to form a nutrition working group to consider the two nutrition projects that are pending, the Kadyampakeni project, and any other matters to come before them. Mr. Updike asked if it is just nutrition or will the group look at irrigation and nutrition working together. Mr. Black stressed the spirit of the working group is to provide dialog back to the researchers of the Foundation's desire to improve the projects, address the budget concerns, and inform them the intent is not to direct their research. Mr. Howard said that future budget concerns dictate that the value to the grower must be useful. With no further discussion, the motion passed unanimously.

Mr. Howard stated the RMC made a recommendation for bridge funding for an equipment purchase on project 19-020 Ritenour, and made a motion that the board approve funding the equipment in this proposal 19-020 Ritenour in the amount of \$108,000. The motion was seconded by Mr. Atchley. Mr. Dantzler explained this equipment will help distinguish whether fruit has been affected by HLB. While the balance of the project is being recommended for MAC funding, the equipment must be purchased at this time in order to build it to be ready in time for harvesting next season, as well as benefit from substantial discounted cost available now. Should the project not be approved for MAC funding, the request for the balance will come before CRDF again. The equipment will use algorithms to calculate fruit volume density, internal brix concentration, and sort HLB versus non-symptomatic HLB fruit, determining economic value on-site. Researchers will be encouraged to coordinate with the PI to mobilize this equipment to their field trials being harvested, much like packinghouse equipment on a trailer. With no further discussion, the motion passed unanimously.

Mr. Black invited Dr. Arnold Schumann to give a presentation on his CRDF-funded project 15-023, 'Citrus nutrition studies for improved survival of HLB-affected trees,' for which he recently submitted his final report on the project. Mr. Dantzler indicated that Dr. Schumann's project, which started in 2015, made a gaps analysis on nutrition needs, much like the working group being formed.

Dr. Schumann's presentation was interrupted in the early stage by a power outage; he will be invited back to present another time.

The meeting was recessed at 11:04 and re-convened at 11:16 am.

Commercial Product Delivery Committee: In the chairman's excused absence, Mr. Dantzler reported that five proposals were received in response to the Large-Scale Field Trial RFP. Of the five, the CPDC made a recommendation to fund the CRAFT proposal, and to request Dr. Albrecht revise her proposal by reducing the budget approximately \$120,000 by removing caretaking costs and the statistical analysis component, and to re-submit for further consideration.

Mr. Hancock made a motion to fund the \$2 million CRAFT proposal and to direct the COO to discuss the revisions requested on the Albrecht proposal with the PI. The motion was seconded by Mr. Atchley, and passed unanimously. In response to Mr. Sparks question on the next steps for generating the contract, Mr. Dantzler said the deliverables must be outlined, which at minimum will include executed contracts between CRAFT and the growers, purchase of trees, and planting of trees.

Select Committee on Plant Improvement: Mr. Bobby Barben reported the committee met on site in the morning, and heard Mr. Ireys' presentation on the sugarcane model for research funding, followed by field tours all afternoon.

COO Report: Mr. Dantzler reported that three board appointments will be needed. Mr. Barben, currently completing Mr. Kress's term, is eligible for re-appointment. FCM has recommended Mr. Ron Mahan's appointment to fill Mr. Newlin's position. Mr. Josh Snively is being considered by FDOC for Mr. Lykes' replacement.

He said staff will have a farewell luncheon for Ms. Brandy Brown tomorrow; board members are welcome to join us.

The Research Manager position was advertised starting yesterday, and will run for 30 days.

Mr. Dantzler said he is considering the idea of a joint meeting of the Research Management Committee and Commercial Product Delivery Committee, for consideration of four projects that require action on funding quickly:

18-007 M. Dutt – 'Investigating the role of transgenic rootstock-mediated protection of non-transgenic scion' (RMC contingency funding for years 2 and 3 dependent on year 1 progress)

18-010 F. Gmitter – 'Upgrading Citrus Genome Sequence Resources: Providing the Most Complete Tools Necessary for Genome Editing Strategies to Create HLB Resistant Cultivars' (RMC recommended obtaining co-funding in years 2 and 3)

18-066C V. Orbovic – '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.' (CPDC continued funding dependent on outcome of transformation labs evaluation)

18-067C J. Zale – ‘Biotechnology to Generate Disease Resistant, Mature Citrus as a Service’
(CPDC continued funding dependent on outcome of transformation labs evaluation)

Mr. Dantzler reported he has received calls on the project from Washington State University, which will be reported in more detail in *Citrus Industry* news. Dr. Killiny, UF-IFAS, is also working on these efforts. A pre-publication article will be coming soon in *Citrus Industry* magazine. CRDF has funded early studies, and currently two projects by Dr. Killiny.

Mr. Dantzler reported the Bayer project is paid through the termination date of June 30, 2020, and noted a decision whether to extend the current contract is due December 31st. While Bayer requested a two-year extension, they may settle for one year. Mr. Dantzler has had co-funding conversations with Citrus Research Board, as well as having discussed ways to save project costs with Bayer, for example, by assisting with field trial work. To aid the decision-making, a joint meeting is being considered with Bayer and industry partners.

Mr. Dantzler discussed the Section 18 renewal with Mr. Aerts, FFVA; everything is on track for the renewal.

Mr. Dantzler reported Ms. Emily Collins, CRDF Field Operations employee, is off for three months. He also reported he has a candidate in mind for the Program Assistant replacement, who will be hired as an OPS employee that may be invited to apply later as a full TEAMS employee.

Regarding the Bayer project, Mr. Barben suggested that we need to know if Bayer’s research will result in a plant defense instead of a biological bactericide solution. What are the chances of this working? We need a higher level of evaluation before making the decision to continue the project. Can the Scientific Advisory Board assist? Mr. Dantzler said Dr. Manker, Bayer, is acceptable to SAB members weighing in on the project. Why spend even more if the growers can’t afford the \$280 million solution; who will pay for it? Mr. Black clarified that, at present, Bayer is only requesting a one-year extension of Phase I. Mr. Dantzler said the last year budget was \$5 million. Asked if Coke and Pepsi would co-fund, he felt they would.

Mr. Sparks reported the legislative budget sessions have started; there will be more committee activity the first couple weeks of October. CRDF’s \$8 million continuation funding request is currently included in Commissioner Fried’s initial budget. The MAC funding should be renewed; NIFA funds continue to be available; millions are not allocated every year. We have to do a better job of tapping into the NIFA funding.

Dr. Rogers confirmed the progress on the culturing work that Dr. Killiny has been involved in and noted it will be featured in *Citrus Industry* magazine in grower language. The new CREC faculty position for Plant Improvement has been advertised; it will help fill the gap between the breeding program pipeline and help in getting the UF large scale trials into the field. The Board will be notified of the December interviews for the position and are encouraged to attend, meet the candidates and provide feedback since this position will be working closely with growers.

Dr. Rogers noted the first fruit display of the year, of early varieties, will take place October 15th at CREC. He also reported that, related to the transformation labs evaluation report UF received in May, the first steps are being taken to set up an advisory committee led by a single faculty supervisor. It is expected the labs will build on each other, strengthen weaknesses, and reduce reliance on CRDF over the next year by streamlining their processes and changing their price structure.

Dr. Rogers reported on new citrus nutrient and fertilization programs to assist growers that will begin at CREC, IRREC and SWFREC in October.

Dr. Rogers reports on another emerging pest problem, the longhorned beetle, reported in three locations in the Clewiston area of Florida, that bores into the wood causing branches to snap off. UF is still waiting on identification of the beetle before making recommendations; growers should report this issue to their Extension Agent if they come upon it.

Dr. Rogers also reported the Peace River citrus agent position has been advertised.

New Business: None

Future CRDF Meetings: The next board meeting will be held on Tuesday, October 22nd, 2019 at 10:00am, at the Government Center in Lake Placid, FL, co-hosted by Highland County Citrus Growers Association.

With no further business, the meeting was adjourned at 12:15 pm.

Minutes submitted by Rob Atchley, Secretary.