

CITRUS RESEARCH AND DEVELOPMENT FOUNDATION, INC.

Minutes of Board of Directors Meeting

April 22, 2014

A Meeting of the Board of Directors of the Citrus Research and Development Foundation, Inc. was held on Tuesday, April 22, 2014 at the 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. Larry Black; Mr. Joe L. Davis, Jr.; Dr. Mary Duryea (telephone); Mr. Tom Jerkins; Dr. Joe Joyce (telephone); Mr. Ricke Kress; Mr. Ben McLean; Mr. Jerry Newlin; Mr. Bob Stambaugh; and Mr. Hugh Thompson. Mr. Bobby Barben and Dr. Lisa Conti were absent. Also participating were Ms. Sarah Anderson; Dr. Elizabeth Baldwin; Dr. Harold Browning; Dr. Jackie Burns; Mr. John Byatt; Ms. Barbara Carlton; Mr. Greg Carlton; Ms. Sharon Garrett; Mr. Ron Hamel; Ms. Diane Johnson; Ms. Susan Logue; Mr. Ernie Neff; Ms. Shannon Shepp; Mr. Marshall Wiseheart and Ms. Audrey Nowicki. Mr. Andrew Brexa; Dr. Jim Dukowitz; Mr. David Howard; Dr. Steve Rogers and Dr. Tom Turpen participated by telephone.

Mr. Black moved to accept the Minutes of the February 25, 2014 Board of Directors meeting. Seconded by Mr. Kress, the motion passed.

Finance and Audit Committee: Chairman Hugh Thompson reviewed the March 2014 financial summary, noting the donation that was received from The Coca Cola Company who pledged \$500,000 per year for three years. He indicated that Dr. Browning is working on the draft budget for FY 2014-15, the Finance and Audit Committee will be meeting in May to discuss the draft budget, and the budget should be presented for approval at the June 2014 meeting. Dr. Browning reviewed some preliminary revenue and expense projections for FY 2014-15.

Mr. Wiseheart, from the FDACS Marketing Division, was invited to discuss the balance in the box tax account and time frame for collections. As of the end of March, 50-56% of assessments were received with approximately \$1.5-1.7 million remaining to collect, with taxes being collected 30-60 days after harvest. The Citrus Marketing Order sunsets every six years. The referendum was last approved by growers in 2009, with the maximum tax rate allowable set at 3 cents per box of harvested fruit. Since the current referendum will expire in August 2016, the process should be started at the end of next year. Mr. Wiseheart verified that the Box Tax funds qualify for use as federal or state matching funds.

Governance Committee: Chairman Bob Stambaugh reported that since February recommendations have been made to complement the current administrative staff to enable Dr. Browning to focus more on tasks the Board and Committees request of him. The committee received a summary of tasks for each current position identifying areas in which a new office position could assist with processes related to day to day office functions, contract development and Foundation and project budgets, as well as initiate utilization of the Project Management module in the accounting system and budget tracking throughout the life of projects. The list of responsibilities fits the description of a Business Manager. Mr. Stambaugh moved the Governance Committee recommend to the Board that the position description be finalized with a minimum qualification of a Bachelor Degree and the position advertised. The motion was seconded by Mr. Davis. Mr. Thompson reminded the Board that the Foundation could be functioning in a different capacity in the next year if the federal and Farm Bill funds most of the research projects through their organizations. The need is acute today, and since all positions are staffed year-to-year a long-term commitment will not be made. The motion passed unanimously. Dr. Browning will discuss the salary range further relative to other Business Manager positions, finalize the position description, and with approval of UF, advertise the position availability for two weeks. The motion passed unanimously.

Mr. Stambaugh asked Dr. Browning to discuss proposed changes to Program and Project Management which were requested by the Committee to establish efficiency in keeping pace with the timelines and goals of the current programs. Dr. Browning presented the overall goals and outlined the program and project management responsibilities and leadership required to meet the goals, which are outlined in the meeting materials. Dr. Browning will continue meetings during the next month with the current program management staff to finalize and present recommendations and a budget for consideration at the May 2014 meeting of the Governance Committee.

Commercial Product Delivery Committee: Chairman Ben McLean began with inviting Mr. Kress to discuss status of Southern Gardens' current projects on the CTV vector from the licensee perspective. Mr. Kress summarized what has been learned to date and current project objectives and regulatory issues related to the CTV vector project being conducted in concert with UF researchers. Mr. John Byatt, UF Office of Technology Licensing, explained the process for researchers to approach OTL with patentable ideas. He referred to Dr. Dawson's CTV projects and noted that the Dr. Browning and staff reviewed the license agreement and shared the analysis with the Board before execution to be sure all provisions to protect the Florida industry were included. He indicated that all annual reports required to keep the UF OTL informed have been submitted by Southern Gardens. Mr. Byatt noted that in making application for a license, a detailed plan must be presented for further development. A marketing piece is being developed by UF to recruit partners.

Mr. McLean reported that the committee heard a lengthy presentation by Mr. Taw Richardson, AgroSource, on the current regulatory status of Firewall® and Fireline® and their plans to expand the labels and proposed budgets for each step. The committee directed Staff to explore a number of specific points relative to contracting and the timeline with AgroSource, and expects to receive a response in May. Dr. Browning provided additional details: 1) the nearest term proposal was to expand the existing Section 18 label for Firewall® for use this season on oranges requesting \$75,000 in support; 2) AgroSource plans to move forward after this season to collect residue data and study efficacy on canker control for oranges to expand the Section 18 SLN label with a budget of \$150,000 per year for two years; and 3) further develop Firewall® and Fireline® to reduce CLas titer in citrus plants with a budget of \$925,000 per year for three years with most of the budget for personnel. Expecting AgroSource's response in the next week or so, a single-topic off-cycle CPDC and Board meeting may be necessary early in May to consider approval to move this into the field as soon as possible.

Dr. Browning also reported on Mr. Dan Botts' committee update that Third Party Registrations is seeking a revised 24c label of the Belay® insecticide for 3-5 year-old trees; it is already approved for non-bearing citrus.

Mr. McLean reported that the committee received a request to renew Dr. Wang's Research Service Agreement #13-02. Mr. McLean moved to fund the graft assay evaluation of up to forty (40) additional soil samples from survivor trees by Dr. Wang under the Research Service Agreement over the next year at a cost of \$88,000. The motion was seconded by Mr. Davis and passed unanimously.

Mr. McLean reported the committee received a request for the renewal of the agreement for evaluation of antimicrobial compounds at UF, IFAS, Fort Pierce. Mr. McLean moved to fund the graft assay evaluation of up to forty (40) additional antimicrobial compounds at the Fort Pierce lab over the next year at a cost of \$88,000. The motion was seconded by Mr. Black and passed unanimously.

Mr. McLean reported the committee received a request from Dr. Turpen to fund the Psyllid Shield, a project that parallels the nuPsyllid project. Mr. McLean moved to approve funding of the proposal "Mathematical Modeling to Evaluate Psyllid Shield Concept" submitted by Dr. Keesling, UF, with a total

budget of \$113,523 and year 1 cost of \$58,311. Seconded by Mr. Davis, the motion passed unanimously.

Dr. Browning reported that by the next meeting we should have a better idea of which projects will go forward with MAC for antimicrobials; a second area of research funding by MAC is thermal therapy. A project draft for removing abandoned groves has been submitted for approval. Efforts under way to inform growers of all available resources in new planting and bring together all available tools is being developed for consideration of MAC funding.

Dr. Dukowitz reported that the quarterly report is included with the materials as well as posted to the web site. An overview of work on GRAS-like materials is posted to the web site. Good progress is being made on naturally occurring microbes with the field trials under way.

Research Management Committee: In the chairman's absence Dr. Turpen reported that the committee met on April 18th to review the progress on two CATP12 projects, Dr. Duan's #717 and Dr. Gonzalez's #726, and recommend approval of funding for the continuation of the projects which was dependent on the success of the proof of concept in the first year.

Duan-717 "Control citrus HLB by blocking the functions of two critical effectors encoded by '*Candidatus Liberibacter asiaticus*'" was to identify why it is important to the technology—multiple bacterial compounds are needed. Mr. Davis moved to approve Dr. Ping Duan's project 717 for years 2 and 3 in the amount of \$261,464 additional funding. Mr. Simmons seconded and the motion passed unanimously.

Gonzalez-726 "A Bacterial Virus Based Method for Biocontrol of Citrus Canker and of HLB" – Dr. Gonzalez responded to the CATP12 RFP for non-copper control on canker. His proposal was approved. He was also requested to do the same study for HLB with the use of the *L. crescens* bacterial culture. Both studies were funded for one year for proof of concept and sufficient progress has been made in the first year to warrant continuation. Mr. Davis moved to approve Dr. Gonzalez's project 726 for years 2 and 3 in the amount of \$593,390 additional funding. Seconded by Mr. Black, the motion passes unanimously.

Dr. Turpen reported on the progress of the nuPsyllid project funded by the 5-year NIFA grant. He discussed psyllid shield, a spinoff of that project which uses CTV vectors in area-wide planting. The modeling trial is important since if it is not planned properly and fails due to size, that data must be included with acceptable data submitted to regulatory agencies for registration for use.

The majority of the research during the first few years of the nuPsyllid project is being done by five of the eight research teams involved. Progress has been made on the Effector Mechanism and Drivers System in three domains. The other three teams are working on a driver, searching for a genetic trait to spread into the population. Of the fifteen subcontractors on the project, about half are actively working at this stage. The team will have to determine what pathway to take on the next steps of research on the nuPsyllid project. There will be one opportunity to reallocate the budget, and Dr. Turpen indicated he would like to re-direct budget allocations to the psyllid shield concept. Spending isn't a problem but he proposed to re-focus the budget. Asked how much longer until this concept has a decent chance for success since it started out as a high risk, low probability of practical success, Dr. Turpen responded the project already has a decent chance; the psyllid shield will work; but releasing the insect is still a high risk proposition. Board members were concerned with the percentage under budget expended to date that not all funds would be utilized.

In his Program Manager's report Dr. Turpen said he is looking at the pharmaceutical pipeline for late stage failures of substances that failed the process towards being used in human and animal health.

Mr. Newlin shared information from a presentation by Dr. Evan Johnson and Dr. Jim Graham where they learned that a lot of impairment is coming through the root system much earlier than was thought. While greening trees grow roots at a similar rate and volume as healthy trees, it is not known why the greening roots die at six months instead of lasting a year. While the disease affects the entire tree and not only the roots, Mr. Newlin feels the Foundation should be pro-active and approach Drs. Johnson and Graham to see if enhancing their project could bring more answers quicker, or broaden the focus and recruit USDA and other researchers to study the disease from this angle. It was noted that three of the treatments that are currently moving into trials are on root topics; in addition, soil antimicrobials, rootstocks and antibacterials work systemically.

Mr. Newlin also would like to see current research on ACP systemic insecticides, i.e. how much, how big, how often, and establish the rate (parts per billion) needed in trees to remain healthy, as well as enhancements to projects studying neonicotinoids.

Dr. Browning and staff will look into these projects and report back.

Industry Research Coordinating Committee: Chairman Wayne Simmons reported that the committee met on April 9th for initial discussions and compiled a list of current priorities. At the next meeting they will compare priorities with the current inventory of research and determine where gaps occur.

Long Term Research Funding and Legislative Matters: Mr. Sparks reported that the final stakeholders (2 Florida and 1 California) to the group of nine must be selected before they can meet to determine the best use of SCRI funds provided by the Farm Bill. The guidelines have not been completed for the federal funding. Three CRDF Board members, Mr. Davis, Mr. Jerkins and Mr. Kress, will be among the five Florida representatives on the committee. Mr. Davis suggested they could benefit from discussions with Mr. Sparks on the political side and Dr. Turpen on the technical side.

Following up on the previous discussions of the matching concept, there could be a matching fund requirement in the first year.

The additional request for \$4 million available on July 1st is on track and included in the FDACS, Senate and House budgets. The \$3 million discretionary funding is before the state now with a decision expected today or tomorrow on the state revenue.

COO Report: Dr. Browning reported that the \$25 million federal NIFA funding will require cost sharing. While the Foundation pledged support for Dr. Burk's project two years ago, researcher requests for letters of support at this time to use Foundation funding for cost match will need to be evaluated carefully.

New Business: There was no new business to report.

Future CRDF Meetings: The Commercial Product Delivery, Finance and Audit, Governance, and Industry Research Coordinating Committees will meet in May prior to the Board of Directors meeting.

- Board of Directors meeting May 27, 2014

With no further business, the meeting was adjourned at 12:25 p.m.

Minutes submitted by Jerry Newlin