CITRUS RESEARCH AND DEVELOPMENT FOUNDATION, INC.

Minutes of the Research Management Committee Meeting March 19, 2015

A meeting of the Research Management Committee of the Citrus Research and Development Foundation, Inc. was held on Thursday, March 19, 2015, at the University of Florida, IFAS, CREC, Ben Hill Griffin Hall, Lake Alfred, Florida. The meeting was properly noticed and recorded. The meeting was called to order at 1:30 pm by Chairman Bobby Barben. Roll was called and a quorum was present. Committee members participating were: Mr. Bobby Barben; Mr. Larry Davis; Mr. Tim Dooley (telephone); Mr. Steve Farr (telephone); Mr. Tom Jerkins (telephone); Mr. Peter McClure (telephone); Mr. Joby Sherrod; Mr. Wayne Simmons; Mr. Jim Snively; and Mr. Mike Stewart. Mr. Bill Barber and Mr. David Howard did not participate. Also participating were: Dr. Harold Browning; Mr. Jerry Newlin; and Dr. Tom Turpen. Also present were: Ms. Brandi Goller; Ms. Audrey Nowicki; Dr. Stephanie Slinski and Dr. Rosa Walsh.

Mr. Simmons moved to accept the minutes of the February 17, 2015 meeting. Seconded by Mr. Snively, the motion passed unanimously.

Mr. Barben stated the committee will review the list of projects included in the materials for which pre-proposals were received and make a recommendation to the Board to invite full proposals on the projects they were interested in.

Dr. Bowman submitted three pre-proposals on (1) Development of super-sour and other promising rootstocks for Florida, (2) Metabolomic profiling to accelerate development of HLB tolerant rootstocks, and (3) Production and testing of transgenic rootstocks for resistance to HLB. <u>Mr. Simmons moved to invite full proposals on Dr. Bowman's three projects; seconded by Mr. Sherrod, the motion passed.</u>

Dr. Dewdney's pre-proposal to study asexual inoculum production of Guignardia citricarpa, the causal agent of citrus black spot was invited to submit a full proposal.

Dr. Turpen noted that some progress has previously been made in different approaches to culturing with CRDF funding to Drs. Triplett, Davis, Wang, Duan, and Gabriel. Since four culturing pre-proposal requests have been received, the researchers will be encouraged to collaborate. If separate proposals are received, PI's can be directed to collaborate on specific aspects in a project. In addition, the PI's will be directed to apply for NIFA funding, since culturing is a priority for the next cycle of funding.

Dr. Duan's pre-proposal on culturing, Innovative approaches to defining components necessary for the growth of CLas, was invited to submit a full proposal.

Dr. Duan also submitted a pre-proposal for rapid evaluation and utilization of HLB resistant/tolerant citrus seedlings. <u>Mr. Sherrod moved to invite a full proposal. Seconded by</u> <u>Mr. Simmons, the motion passed.</u>

Dr. Etxeberria's pre-proposal to learn more about root grafting was invited for submission of a full proposal.

Dr. Folimonova's pre-proposal to study good and bad microbes (endophytes) from survivor trees was not invited to submit a full proposal.

Dr. Gabriel's pre-proposal on culturing, exploiting the Las phage for potential control of HLB, was invited to submit a full proposal.

Dr. Gmitter's pre-proposal on the underlying mechanisms associated with inhabitation of the ACP life cycle was invited to submit a full proposal.

Dr. Gmitter's pre-proposal for genetically improved trees was invited to submit a full proposal to allow Staff to determine if there is overlap with his recently awarded NIFA grant.

Dr. Gowda's pre-proposal for a non-blooming transgenic tree to act as a trap plant was invited to submit a full proposal.

Dr. Grosser's pre-proposal on Juvenile Citrus Transformation was invited to submit a full proposal.

Dr. Grosser's pre-proposal on manipulating interaction of rootstocks and nutrition was invited to submit a full proposal, and encouraged he collaborate with a soil scientist as well as a researcher having a nutrition background.

Dr. Hall's pre-proposal for high-throughput inoculation of transgenic citrus will address the need for a hot psyllid lab, one of the recommendations of Knowledge Mapping session, and was invited to submit a full proposal.

Dr. Killiny's pre-proposal to disrupt LuxR solo quorum sensing to control HLB was invited to submit a full proposal to obtain further review by *ad hoc* and SAB.

Dr. Lewis's pre-proposal on culturing, Eradicating CLas, was invited to submit a full proposal.

Dr. Lu's pre-proposal for manipulating defense signaling networks to stimulate broadspectrum resistance to HLB and other diseases was invited to submit a full proposal.

Dr. Mou's pre-proposal for Gamma ray treatment studies for HLB resistance was invited to submit a full proposal.

Dr. Pelz-Stelinski's pre-proposal following up on CTV vectors and RNAi observations was invited for a full proposal.

Dr. Reuber's pre-proposal is to make a GMO tree resistant to canker that is genetically altered, not transgenic, was invited to submit a full proposal.

Dr. Schumann's pre-proposal requesting continuation funding for citrus nutrition studies for improved survival of HLB-affected trees was invited to submit a full proposal.

Dr. Stansly's pre-proposal for management tactics based on psyllid movement has been funded previously and was not invited to submit a full proposal.

Dr. Stelinski's pre-proposal to provide a model for an optimal spraying pattern was invited to submit a full proposal.

Dr. Stover's pre-proposal on resistance and tolerance in scion breeding, to make additional tolerant genotypes available in the short- to medium-term, was invited to submit a full proposal.

Dr. Stover's pre-proposal on implementing transgenic tools to produce commercial scion cultivars resistant to HLB and canker was invited to submit a full proposal.

Dr. Triplett's pre-proposal, Developing a culture medium for Liberibacter asiaticus through comparative multi 'omics analysis with its closest cultured relative, L. crescens, was invited to submit a full proposal.

Dr. Wang's pre-proposal to control citrus HLB by counteracting the SA hydroxylase of CLas was invited to submit a full proposal.

Dr. Turpen reported on two additional submissions:

Dr. Gurley's pre-proposal request to fund his project for high through-put screen of seedlings for an additional year was invited to submit a full proposal.

Dr. Ayyadurai's pre-proposal for a six-month study to mine scientific literature and create models to show hypotheses to test, looking at the shikimic acid pathway as a first example, was invited to submit a full proposal for additional details.

Dr. Browning presented three requests for bridge funding on current projects to provide for continuity or scale-down while the full proposals on those projects are being considered for continued funding by the committee and Board.

- Dr. Grosser's bridge funding request on project #547 Juvenile Citrus Transformation project which terminates March 31st in the amount of \$33,568 to continue four months through the end of July, 2015. <u>Mr. Snively made a motion to recommend Dr.</u> <u>Grosser's request for additional funding in the amount of \$33,568 for Board approval.</u> <u>Seconded by Mr. Davis, the motion passed.</u>
- Dr. Grosser's bridge funding request on project #548 Interaction of Rootstocks and Nutrition project which terminates March 31st in the amount of \$23,336 to continue four months through the end of July, 2015. <u>Mr. Snively made a motion to</u> recommend Dr. Grosser's request for additional funding in the amount of \$23,336 for Board approval. Seconded by Mr. Stewart, the motion passed.
- Dr. Gabriel's bridge funding request on project #723 phage project which terminates April 30th to continue three months through the end of July, 2015. <u>Mr. Simmons</u> <u>moved to recommend Dr. Gabriel's request for bridge funding pro-rata through the</u> <u>end of July, 2015 for Board approval. Seconded by Mr. Sherrod, the motion passed.</u>

Dr. Turpen reported on the nuPsyllid project that none of the three driver group pathways rated higher than the others for success, and the nuPsyllid driver, effector and outreach teams are preparing revisions to objectives and budgets through the end of the project to determine the best utilization of funding for the remainder of the project. He also noted that the viral work in the program will continue as part of the \$3.5 NIFA Grant recently awarded to Dr. Bryce Falk, with the Project Director verifying that there is no overlap in funding.

Dr. Browning reported the Knowledge Mapping group had a follow-up phone call. Dr. Susan Logue will make a presentation on the broader objectives to the Board, following up with additional details to be presented to the Research Management and Commercial Product Delivery committees next month identifying capacity building and structural needs. Topics being considered for Phase 2 of the Knowledge Mapping process likely to begin in July are breeding HLB resistance or psyllid intervention.

With no further business, the meeting adjourned at 3:45 pm

Minutes submitted by A. Nowicki