A meeting of the Board of Directors of the Citrus Research and Development Foundation, Inc. was held on Tuesday, February 22, 2022, at the UF/IFAS Citrus Research and Education Center, Ben Hill Griffin Hall, Room 101, Lake Alfred. The meeting was properly noticed and recorded. President Rob Atchley called the meeting to order at 10:01 a.m. Roll was called and a quorum was present. Board members present were Rob Atchley, Chris Gunter, Aaron Himrod, Greg Hodges, David Howard, Deeley Hunt, Jeanna Mastrodicasa, Morgan McKenna, Matthew Story, and John Updike. Also participating were Fernando Alferez, Peter Chaires, Kim Bowman, John Chater, James Cooper, Rick Dantzler, Bill Dawson, Pam Fentress, Steve Futch, Fred Gmitter, Jim Graham, Ned Hancock, Gio Ijpkemeule, Leigh A., Ed Leotti, Bo Meyering, Tom Minter, Ernie Neff, Audrey Nowicki, Brandon Page, Ray Royce, Swadesmukul Santra, Ralph Scorza, Brian Scully, Moira Sheehan, Wayne Simmons, Rashmi Singh, Steve Smith, Buddy Strickland, Caroline Tardivo, Barbara Thompson, Rosa Walsh, and Deidra Whatley.

The meeting was opened by welcoming the new CRDF staff member Barbara Thompson. Mr. Rick Dantzler announced the resignation of former staff member Deidre Whatley and presented her with flowers. Deidra sang the National Anthem.

Former CRDF President David Howard was presented a plaque in honor of his time served on the board. Mr. Howard gave some parting remarks.

Mr. Atchley entertained a motion for approval of the minutes of the last Board of Directors meeting. Mr. Howard moved to approve the minutes from the January 25th meeting. Mr. Himrod seconded the motion and it passed unanimously.

Mr. Dantzler invited Dr. Moira Sheehan of Cornell University to present the findings of the Plant Improvement Review Panel which met in November and December. Dr. Gunter made some remarks about the first part of the presentation and Mr. Dantzler asked a question regarding the different stages. Dr. Ralph Scorza added comments regarding HLB resistance. Dr. Mastrodicasa talked about the new IFAS Evaluation and asked whether they had been in touch with the new HortScience faculty member, Dr. John Chater, Assistant Professor of Horticultural Sciences at Lake Alfred. Dr. Chater was present at the meeting and was briefly introduced. While he had been hired at the time of their review, Dr. Chater had not started in his new position yet.

When Dr. Sheehan reached the section on genomic platforming, Mr. Dantzler asked Dr. Gmitter to join the discussion by phone. Dr. Gmitter summarized the status of work done to date on creating genomic platforms. Mr. Dantzler, along with Mr. Updike and Chris Gunter, asked for clarification on the cost of creating the genomic sequencing platform recommended in the report.
Since Dr. Sheehan had another commitment, Dr. Scorza discussed the remaining recommendations, noting that reports need upgraded and that UF and USDA breeders should meet to collaborate annually. He then entertained questions from the board.

Mr. Dantzler asked about GMOs and CRISPR funding.

Mr. Howard asked if other industries have the same large inventory of material, whether they were able to sort through inventories efficiently, and if there was a strategy recommendation going forward. Mr. Dantzler noted that Dr. Sheehan said they had worked with commodities that had similar high inventories.

Dr. Gunter asked if the panel had a background in citrus and it was noted that they did not.

**Research Management Committee:** President Rob Atchley asked Mr. Updike to report on the deferred projects from the 2021 RFP awaiting approval. Mr. Updike read the titles and PIs of three of the four deferred plant improvement projects as follows:

- **Project No. 21-008 • Bowman**
  Development of Next-Generation SuperSour rootstocks with tolerance to HLB

- **Project No. 21-025 • Stover**
  Transgenic capable field site to assess HLB-resistant and other improved citrus

- **Project No. 21-028 • Wang**
  Generation of non-transgenic HLB-resistant sweet orange varieties using CRISPR-Cas

Mr. Updike made a motion to accept previous RMC recommendations to fund these proposals. The motion was seconded by Mr. Story. There was no discussion and the motion carried unanimously.

Mr. Dantzler invited Tom Minter to make a presentation on Label Registration. Mr. Minter outlined required experimental plot design and the timeline for EPA registration.

Mr. Dantzler asked about good laboratory practices (GLP). Mr. Minter said they sent their samples to an Analytical Lab in Idaho. Dr. Gunter, Mr. Atchley, and Mr. Howard had a discussion on GLP within the University.

IR-4 could expedite the registration process, but the approval process is not a quick one. Mr. Howard noted that the gibberellic acid data is important to the industry for the next growing season.

Mr. Dantzler made a reference to the meeting that he and Mr. Page had the previous day with a company that showed promising OTC application procedures.

Then came discussion by Mr. Atchley and Mr. Himrod pertaining to Project No. 21-031 by Grosser titled “Breeding and evaluation of scions and rootstocks necessary for sustainable and profitable
citriculture in Florida.” After confirming that the project was not recommended for funding by RMC, Mr. Updike made a motion to deny funding for this project. It was seconded by Mr. Story and the motion carried unanimously.

After discussion of the need to inventory the material already produced, Mr. Updike made a motion to request a proposal from Dr. John Chater, UF, and Mr. Matt Mattia, USDA to inventory and evaluate existing germplasm from both UF and USDA. The motion was seconded by Mr. Howard. Mr. Atchley suggested escalating the inventory process by keeping the study of new lines at a lesser pace. The motion passed unanimously.

It was noted that an IFAS taste testing was going on next door and members were encouraged to drop by. There was discussion of the value of the tasting when there was no data or information provided, that no one questioned whether the breeders were creating delicious cultivars, but nothing ever seemed to go anywhere, which increased frustration.

Mr. Updike noted that Mr. Himrod has been named Vice-Chair for the Research Management Committee. There was consensus and approval by the board.

Mr. Dantzler reviewed the topics that the RMC considered for directed research:

- Tree injection/oxytetracycline: Dr. Albrecht will be contacted and requested to provide side-by-side comparisons of oxytetracycline formulations and injection devices from suppliers who have approached CRDF.
- 2,4-D: A supplier is in the process of investigating a label change for earlier application, not more applications. Mr. Dantzler was advised to check with Mr. Tom Minter since he presented on the matter earlier today.
- Gibberellic acid: Three or four applications are currently under study. Mr. Dantzler was directed to contact Mike Aerts, FFVA, about off-label procedures.
- Brassinosteroids: Dr. Santra, UCF, and Dr. Alférez, IFAS, are being requested to fine-tune the use of brassinosteroids, as well as zinc.

There was consensus from the Board that the focus on the above projects should be as directed research.

The RMC discussed whether the 2022 RFP should be initiated at this time. It was noted that in 2021 there was not a topic for genetic improvement, but a number of preproposals were received on it. There was a suggestion to hold off the 2022 RFP until the financial situation is better understood after the directed research projects are funded.

Dr. Graham reported that changes to the Best Management Practices are forthcoming as a result of CraFT projects.

Mr. Minter said there needs to be more coordination in the field and data collection of evaluations during the registration process.
Mr. Howard made a motion to proceed with a directive to pursue the topics identified as directed research. The motion was seconded by Mr. Himrod and the motion passed unanimously.

Mr. Dantzler noted that topics not recommended to pursue at this time were interstocking and Sugar Belle planting to improve juice quality.

**Executive Committee: Did not meet.**

**Finance and Audit Committee:** Mr. Mahan was not present, so Mr. Atchley asked Audrey Nowicki to give the Finance Report. Ms. Nowicki reviewed the January Financial Statements. Dr. Mastrodicasa made a motion to accept as presented. It was seconded by Mr. Story, and the motion passed unanimously.

Dr. Scully reported on the Donaldson tree discovery - that USDA is already conducting independent trials, getting good results with genotyping, but the process is longer term. They have reports from years ago when reporting was much more rigorous that showed there have been attempts at reducing juvenility. Studies on reflective mulch did not prove successful.

Dr. Scully also pointed out that the 37,000 crosses made by Dr. Stover and his team were over an eight- to ten-year period at the directive of the director to test, choose the best selections, and get them in the field.

Dr. Scully then discussed personnel changes due to Dr. Stover’s retirement.

**Governance Committee:** Mr. Dantzler reported that the Governance Committee had not met. He summarized the changes to the Bylaws where the Commercial Product Delivery Committee (CPDC) has been combined with the Research Management Committee (RMC). The new RMC would have more than five and up to seventeen members, and that three subcommittees are anticipated. Mr. Howard made a motion to accept the changes combining the CPDC and RMC and restructuring. The motion was seconded by Mr. Story and passed unanimously.

The revised RMC members list of 17 was discussed, initially to include four board members, one member each from IFAS, USDA, and FDOC, and no more than one member from each company. There was discussion whether to include Dr. Par Ouimet or Mr. Sean McCoy. A motion was made by Mr. Himrod to retain Dr. Ouimet on the committee. The motion was seconded by Mr. Story and passed unanimously.

**New Business:** None

**COO Report:** Most of Mr. Dantzler’s report had been covered previously. He added on behalf of Mr. Sparks that discussions continue with the Legislative funding, but at present the Foundation is likely to receive $3M for research, with the additional $5M for CraFT.

**Future CRDF Meetings:** CRDF Board of Directors, Tuesday, March 22, 2022, at 10:00 a.m.

With no further business, the meeting adjourned at 1:45 p.m.

Minutes submitted by John Updike, Secretary