

National Agricultural Research, Extension, Education and Economics Advisory Board

MEETING MINUTES

Wednesday, February 9, 2022 – Thursday, February 10, 2022 Virtual Meeting Via Zoom

EXECUTIVE SUMMARY DAY #1: WEDNESDAY, FEBRUARY 9 Presentation and Questions and Answers by Deputy Under Secretary Shefali Mehta 3-5 'Panel Discussion' with Research, Education, and Economics Leadership Team 5-11 • Agricultural Research Service (ARS), Dr. Chavonda Jacobs-Young, Administrator • National Agricultural Statistics Service (NASS), Mr. Hubert Hamer, Administrator • Economic Research Service (ERS), Dr. Spiro Stefanou, Administrator National Institute of Food and Agriculture (NIFA), Dr. Carrie Castille, Director • Office of the Chief Scientist (OCS), Dr. Dionne Toombs, Director Virtual 'Whiteboard' of Board Big Picture Recommendations and Thoughts on Leadership Panel DAY #2: THURSDAY, FEBRUARY 10 Old Board Business – FY20/FY21 Projects – Board Chair and Members • NGRAC Report – Safeguarding and Distributing Native Crop Wild Relative Genetic Resources of the United States (*Approval*) • NGRAC Report – Microbial Genetic Resources in the USA (*Approval*)

- Diversity and Inclusivity Letter (Board has approved, discussion and next steps)
- Ad hoc committee on Agriculture Extension Programs (status, discussion, and next steps)
- Relevance and Adequacy (R&A) of 2020 Ag Climate Adaptation Report (discussion and next steps)

Committee/Council/Subcommittee Updates and Forecasted Updates

- Pollinator Subcommittee, Ms. Elizabeth "Izzy" Hill, USDA Honey Bee and Pollinator Research Coordinator
- Citrus Disease Subcommittee, Mr. William "Gee" Roe III, Chair
- Specialty Crop Committee, Dr. Gregory Goins, Chair
- National Genetic Resources Advisory Council, Dr. Jim McFerson, Lead Recommendations Author
- Board and Committee/Subcommittee Member Survey Key Learnings, Bayard Brewin, Sage Communications, LLC Overview and Questions and Answers

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EXECUTIVE SUMMARY

The National Agricultural Research, Extension, Education, and Economics (NAREEE) Advisory Board provides advice to the Secretary of Agriculture and land-grant colleges and universities on top priorities and policies for food and agricultural research, education, extension, and economics. The NAREEE Advisory Board's main objective is to contribute to effective federal agricultural research, education and economics programs through broad stakeholder feedback and sound science in its ongoing role as advisor to the Secretary of Agriculture. The Advisory Board also, by mandate, provides reports and recommendations to the appropriate agricultural committees of the U.S. Congress. The Advisory Board met in a virtual public session on Wednesday, February 9th through Thursday, February 10th via a virtual zoom meeting. The meeting's main goal on day #1 was to hear from the U.S. Department of Agriculture's (USDA) leadership and day #2 was used to review old Advisory Board business and conduct new Advisory Board business.

DAY #1: WEDNESDAY, FEBRUARY 9

Welcome and NAREEE Advisory Board Staff Introductions

Ms. Kate Lewis the NAREEE Board Executive Director/Designated Federal Officer (DFO) opened the meeting by welcoming all who called in and introducing her colleague Ms. Shirley Morgan-Jordan and DFO Lewis introduced Ms. Shirley Morgan-Jordan and the NAREEE Board Chair – Dr. Edmund Buckner.

Presentation and Questions and Answers by Deputy Under Secretary Shefali Mehta

DFO Lewis went on to introduce Dr. Shefali Mehta, the USDA Deputy Under Secretary who then introduced the USDA Deputy Secretary Dr. Jewel Bronaugh who gave prepared remarks.

After Dr. Bronaugh's remarks Dr. Mehta began her presentation on investment in research and development and stating that it is essential to create innovation and technology. Dr. Mehta commented that there has been a decline in the US on public Agricultural research and development spending and that is problematic when it comes to delivering to the needs of Americans. Dr. Mehta also spelled out the top priorities of the USDA and stating that the Research, Education, and Economics (REE) organization aims to ensure that the public private partnerships they enter are meaningful for both the partners and the stakeholders who would benefit and that public private partnerships also help to improve innovation and adoption of new reach and technology to meet demands in the agricultural space.

Dr. Mehta opened the floor to questions and DFO Lewis stated that there were pre-submitted questions. The first question was "How will updates be provided to stakeholders to show progress on these broad strategies and objectives, as we approach the midpoint in 2023?"

Dr. Mehta answered by stating that right now REE is evaluating our science priorities, which includes the progress of deliverables that were mentioned in the science blueprint. As we go through this evaluation process, we're going to bring that to you in a very detailed manner so that you can see what the outcomes are, and we're also layering in and understanding the priorities that we just went through to make sure that we have aligned them well. The other pieces that this is actually as we're going through this evaluation of our science priorities, and it's a strange I'm answering going to be answering your question with an ass it, we would really appreciate your input on this and I think that's really what's critical so we will be really kind of framing them in a way where we would like to have your input so that we are ensuring that those areas are indeed in line with where you think they should be, ensuring that especially that some of the deliverables are in line with what you would want to see.

DFO Lewis pivoted to Dr. Ariel Ortiz-Bobea, from Cornell University who had a question regarding data and what efforts are being made to improve it?

Dr. Mehta answered that she being an agricultural economist understands how critical it is and stated that there is quite a bit of work that is underway ensuring that we have consistent and standardized data governance to ensure that there are right levels to be able to share and that REE is learning how to create the consistency and standardization within the USDA, both from the user's perspective from the surveyors.

Dr. Mike Oltrogge, President of Nebraska Indian Community College asked the next question. He stated that he was very happy that Dr. Mehta talked about diversity inclusion and equity and that he is very interested in that equity commission that's coming up. And he also mentioned some of the key points from one of the press releases from the Secretary from a few weeks back talked about equity. In the end his two questions were "how can the USDA make the 1994s, the 1890s and the Hispanic Serving Institutions, more equitable when the administration talks with OMB about the recommendations for the President's budget?" And his other question was asking Dr. Mehta to talk a little more about the equity commission and how that's going to look.

Dr. Mehta answered by stating that there has been an ongoing discussion during Secretary Vilsack first eight years with President Obama and the budget was at the forefront of his discussions with Congress. This work is what led to the creation of foundation for food and agricultural research. And Dr. Mehta went to the next question on an investment in Minority Serving Institutions, 1890s and 1994s stating that there are significant programs coming forward across the USDA that are targeting people within these communities, and that was enabled through the American Rescue Plan. She went on to state that REE already has a lot of great relationships that they continue to build, but it's partnerships like the NAREEE Advisory Board that help the USDA identify what additional folks the USDA should work and how can the USDA be more impactful. She also stated that there will be more announcements that will be coming through and that there is a lot of work underway.

Dr. Edmund Buckner had a question related to a slide that Dr. Mehta presented that showed a purple trend line that dealt with the talk about investment in public, and research and development and the purple trend line represents United States and, of course, it's on a downward trajectory, and all the other trend lines and other major anchors and countries. And

his question was "what's being done to try to address that downward trend line and how we can change the trajectory?" He also asked what can this board do to help change the trend?

Dr. Mehta answered that we all we all can do something, and I think and definitely for each of the board members, it's really understanding how to convey those needs. She went on to state that being able to really shine the light on how the work we do translates to the ground. And communicating the needs to people who are thinking through that making the decisions and just really elevating what the importance is so that that trend line isn't going in that direction.

Dr. Mehta saw another question on scientific integrity and gave her comment stating that she just wanted to highlight that scientific integrity is at the forefront of what REE does. She went on to state that there is a Federal government level effort and the USDA played a pretty big role bringing scientific integrity is at the forefront.

DFO Lewis noted that there is a transcript of the chat and if more questions and answers are needed, we can add it to future meetings. And that ideas and concepts that the board has more interest in talking about can certainly be discussed at an upcoming executive committee meeting as I know we're thinking about the structure and the recurrence of the board's executive committee meeting with the REE leadership team and that is something that happens at regular intervals throughout the board's year.

Dr. Mehta quickly answered a question on the Genome to Phenome Initiative mentioned the Genome to Phenome Initiative is included in the 2018 Farm Bill and t will be leveraged, so we can share more information and more detail if you'd like as well to that question because that that is critical. We have been working on thinking through it. And the USDA is supporting the priorities when it comes to climate change or climate smart agriculture, and there has been quite a bit of discussion around that arena of ensuring that this Initiative which is foundational to our research is given priority.

DFO Lewis thanked Dr. Mehta for her time and went into a break.

'Panel Discussion' with Research, Education, and Economics Leadership Team

DFO Lewis welcomed everyone back and thanked people rejoining the meeting so timely after the first morning break. She noted that the REE Leadership Team had joined the call for their presentations. DFO Lewis informed the persons on the call that a question-and-answer session will happen after all the presentations were given. DFO began by welcoming Dr. Dr. Chavonda Jacobs-Young.

Dr. Chavonda Jacobs-Young presented and discussed the Agricultural Research Service (ARS). She described it as one of the intramural agencies of USDA and that the ARS conducts research, we are the nation's cadre of agriculture researchers and ARS has a very important role in U.S. agriculture as well as many parts of working around the world. She went on to state that the ARS's mission is to simply deliver scientific solutions to national and global agricultural

challenges. Dr. Jacobs-Young also went over the FY22 the proposed budget and the ARS's accomplishments.

DFO Lewis thanked Dr. Jacobs-Young and moved on to Mr. Hubert Hamer, Administrator, National Agricultural Statistics Service (NASS). Mr. Hamer gave NASS's mission which is to provide timely, accurate and useful statistics and service to U.S. agriculture. He then walked through its history and gave highlights of projects as they move forward. NASS has 12 regional offices and 36 satellite offices. NASS is one of the smaller agencies that are department about 825 Federal staff that that is augmented with about 3,000 contract employees that do most of our data collection activities. NASS disseminates more than 450 agricultural statistics on an annual basis with application on crops, livestock, economic and environmental statistics. He went on to present that NASS also conducts the Census of Agriculture every five years and that NASS is preparing for the 2022 Census.

DFO Lewis introduced Administrator Spiro Stefanou from the Economic Research Service (ERS).

Dr. Stefanou began his presentation by giving ERS's mission which is to anticipate the trends emerging issues in agriculture, food, the environment, and rural America. This is done by conducting high quality objective economic research to inform and enhance public and private decision making. Dr. Stefanou also stated that it is important to note that as a Federal Statistical agency, ERS makes no policy recommendations.

DFO Lewis thanked Dr. Stefanou and went on to introduce Dr. Carrie Castille the Director of the National Institute of Food and Agriculture (NIFA).

Dr. Castille began her presentation by mentioning how proud she was to be a former chair of the NASREEE Advisory Board. She started her presentation by giving background on NIFA as an extramural agricultural research funding agency that advances agricultural sciences by investing in research, extension as well as education across the entire country. Dr. Castille went on to discuss NIFA's mission as they support the development and application of a broad spectrum of science and technology to improve nutrition security, develop climate smart agricultural technologies and practices, build new and better markets for us agriculture to prepare the next generation of agricultural leaders and a strong agricultural workforce and promote diversity, equity inclusion and accessibility across all NIFA's programs.

DFO Lewis then introduced Dr. Dionne Toombs, Director of the Office of the Chief Scientist (OCS).

Dr. Toombs began her presentation by stating that OCS is small staff Office of about 24 to 25 employees, because OCS has fellows that come in and out of our office as well on. OCS provides leadership and coordination across the entire department, and we make sure that the

research supported by, and the scientific advice provided to USDA, and external stakeholders are held to the highest standards of intellectual rigor and scientific integrity. Dr. Toombs went on to present on hot topics and OCS's diverse portfolio.

DFO Lewis thanked Dr. Toombs for her comprehensive overview of the Office of the Chief Scientist, and the role that this office with the other four REE agencies plays. DFO Lewis went on to open the floor to questions for the administrators and directors.

Questions/Comments:

Ms. Donnell Brown, National Grape Research Alliance had a question for Dr. Jacobs-Young. She has been "waiting and following her [Dr. Jacobs-Young] appointment as Undersecretary for REE and wondering when that's going to happen?"

Dr. Jacobs-Young answered that the confirmation process is very complex and that she has been voted out of the agricultural committee senate committee with a unanimous vote and is awaiting a floor vote from the full Senate. She went on to state that she is looking forward to being able to move forward with the confirmation because there is lots to do.

Dr. Mark Lawrence, Mississippi State University, College of Veterinary Medicine, and I represent colleges of Veterinary Medicine had a question: What is the status on in-path and how is the workforce development and hiring process going and are you are you finding enough expertise to fill those positions?

Dr. Jacobs-Young answered that she just had a conversation this morning talking about how the USDA recruits and retains STEM students in agriculture, and it's been a huge impact as an example of why we need committed a workforce development. She went on to answer that the USDA is committed to workforce and development training programs to continue to prime the pipeline. And she hopes that the Kansas State University colleagues will hopefully be back online and open to operate in the next year or so. Dr. Jacobs-Young promised to keep this advisory board updated as we continue to move forward.

Dr. Ariel Ortiz-Bobea, Cornell University had a question for Dr. Stefanou or Dr, Castille who asked if the change in ERS and NIFA locations had any major impact on the work they do?

Dr. Stefanou answered first stating that ERS is not in two locations, they are in 36 different states right now. He went on to state that ERS has hired up dramatically, but we are also in a pandemic and it's not easy for people to move. And we have the Secretary's initiative to create a modern workplace for modern workforce ERS will have staff distributed everywhere.

Dr. Castille provided her answer stating that she thinks the first thing is to really recognize the leadership, and, and the support throughout the entire mission area as well as the Office of the Secretary and giving us the latitude to really rebuild in a very thoughtful manner, making sure that we're doing it from a place of diversity, and in which we rebuild teams, based on the communities that we serve, really paying attention to the science, but also being able to attract the very best and brightest regardless of where they're located. Dr, Castille went on to mention

that NIFA has been able to provide that vital training as well and NIFA has been able to recruit many people from land grant universities.

Dr. Annette Levi, California State University, Fresno who represents a Hispanic Serving Institutions as well as non-land grant colleges and universities. had a question for Dr. Toombs asking about this agreement with the United Arab Emirates, and the OCS and how that came about?

Dr. Toombs answered that it started, by working with the Department of State and OCS determined that this would be a great group to meet with and a great place to meet so that we can bring together the other groups so they were a great partner and helping to organize and where we can bring all the different participants together so it's an effort that is continuously growing. Dr. Jacobs-Young added that part of our opportunities to meet the challenges and climate are going to require us to be innovative and invest in agricultural research. And so, the United Arab Emirates was a willing leader, globally, and of course we want to be a part of that.

Dr. Mark Lawrence had a question for Dr. Carrie Castille regarding the balance between individual investigator grants and how would NIFA approach those multi, multi-disciplinary larger initiatives?

Dr. Castille answered that looking at the multidisciplinary approach in which we're working across disciplines cross functional, cross disciplinary cross, but also across agencies, across mission areas, it's going to take multiple disciplines in order to address some of the complex challenges that we have before us. NIFA has 74 budget lines as she mentioned which gives NIDA the ability to be nimble, when it comes to the cross collaboration and cross pollination between basic science as well as applied science as well as the a budget line that does not apply to folks in which they can achieve their goals and, but I do believe the opportunities around the, the cross disciplinary, and they're there as well as, as the single investigator opportunities as well.

Dr. Mario Ferruzzi, University of Arkansas for Medical Sciences in Little Rock built on Dr. Lawrence's questions stating that it's important to consider the fact that individual investigator awards, especially from NIFA are critical to development of our faculty through promotion and tenure. He quoted Dr. Jacobs-Young asking, "how are we going to get the next generation trained?" Dr. Ferruzzi went on to state that he commends NIFA for finally increasing the amount of those awards but in comparison to awards funded by National Institute of Health (NIH), NIFA falls short. In finality Dr. Ferruzzi asked what we can the board do from our side to kind of help make a point to drive that if we're really talking about the nation's health?

Dr. Jacobs-Young answered by wanting to talk about the intersection between public health and food and nutrition is a place where USDA has a key piece of the puzzle. When you talk about our six nutrition centers across the country are focused for decades. On the healthy components in food, how do we identify compounds, how do we use our enormous breeding programs to be able to bring those compounds into food. The USDA doesn't focus on supplements that's not the USDA's role. Its role is to create a healthy diet to eat foods to be healthy right how do we improve the quality of life by eating unhealthy healthy foods. And so, this idea about precision

nutrition is one that we have a lot of folks are excited about and there's a brand new announcement out today with the USDA's partnership with Texas A & M. Soon the USDA will have the ability to be able to identify the healthy compounds use our breeding programs.

Dr. Jacobs-Young gave Dr. Castille the floor and she stated that speaking on the complementarity between the entire mission are is that the USDA has expanded Food and Nutrition Education Program and that really goes into the community city Extension Service and really looks at how we promote healthy diets, based on the communities that we live in, and based on those recommendations from science, as well as the Gus Schumacher nutrition incentive program where you're looking at really working with the local foods producers and being able to use that as an educational model.

Dr. Toombs mentioned that in addition to, the USDA has other committee meetings where they meet with NIH, and so we share what we're doing. Again, so we can still look at gaps in that area and these are things that we have been working on, and I'm looking forward in the future to what we will be working on because there was something that we worked on in the past where we were trying to get the Food and Drug Administration, the Center for Disease Control, and NIH together, and she believes that the USDA has an opportunity to pick that back up in the near future, so we can look at that nexus and focusing on that precision nutrition.

DFO Lewis acknowledged a new hand, Ms. Tambra Stevenson, Women Advancing Nutrition Dietetics and Agriculture (WANDA). DFO Lewis asked Ms. Stevenson to introduce herself and to share a little bit about WANDA as well because she was not sure our leadership team knows much about the organization.

Ms. Stevenson went on to state that she is the founder and CEO of WANDA, Women Advancing Nutrition Dietetics and Agriculture, which is a 501c3 nonprofit, with a focus in education advocacy and innovating the food system by investing in the human potential of Black and Brown women and girls to lead in the food system. She went on to state that she was happy to see such inclusive voices being represented at USDA today and that WANDA's focus has been really bringing about awareness and advocacy of the fact that we have a lack of diversity inclusion in agriculture in nutrition and dietetics. So, in response to hearing about nutrition security in the OCS, and how we choose to define what that looks like it what it means to secure the nation's nutrition. Ms. Stevenson thinks not only and the point that Dr. Jacobs-Young just brought which is so critical is access to our cultural foods, what does the data look like in terms of food composition and providing that information to extension services? She went on to ask as a former extension agent at the University of the District of Columbia that she is thinking about an inclusive workforce and what do advancing nutrition leaders look like with the fact that we have less than, 10% of people of color in the field of nutrition dietetics. She went on to comment that people have strived hard for representation in the culinary world and the farmers, but to her the next advancement is in the nutrition space, because if this is a food fight, we clearly do not have enough troops on the ground to win this war. Ms. Stevenson says all of this because consumers contact our organization seeking dieticians seeking nutrition educator for their programs as far as Oakland, to DC and the reality is we are not training enough folks in the field of nutrition, and it is. And it there is a role that government plays in advancing in bringing

awareness of the numbers in the workforce. That's where an economic study in my opinion is critically needed like what is the economic cost when we don't have a strong inclusive workforce in the field of nutrition and dietetics. And then what does it look like when we create loan repayment programs for folks who go into the field of nutrition which is not available as her so has a program at the health, which is called the health professionals scholarship program that covers doctors and nurses and PhDs, but not already ends for instance. She also asked when it comes to looking at the food as medicine program and how can that fit into the extension work that's happening with F-net with SNAP and how does it fit into the Farm Bill? And lastly, she asked how, since she is new in this role does the Board work best with the agencies in being able to bring around policy recommendations?

Dr. Spiro Stefanou answered by stating that his office does social science work and that it is hard to do good social science work if you don't have all society as part of that team. And so ERS is cognizant of that we're working towards it. Dr. Stefanou admits that there are challenges but, a key theme here and trying to understand behavior, and how it influences decisions, and then how policies can build on how behavioral changes are affected or impacted. And he believes that the NAREEE board's work with help the USDA develop a more inclusive awareness.

Dr. Castille added that Ms. Stevenson can amplify the importance and help to advertise that the USDA has 1890 scholarships particularly around our historically underserved populations. Dr. Castille went on to comment about scholarships that NIFA provides and throughout the USDA Office of Partnerships as well and those are opportunities as well to be able to provide some support for students that are interested in in agricultural sciences in those fields.

DFO Lewis thanked Ms. Stevenson for her valuable perspective.

Dr. V.M. 'Bala' Balasubramaniam, Ohio State University had a question on how does the USDA plan to leverage some of the synergy with the different in the agencies?

Dr. Jacobs-Young answered by stating part of our roles as their side and leader on here doesn't serve in many in our agency efforts, and so we wouldn't have been successful all these years if we had been working with, you know, the Department of Energy and USDA's Office of Science are working with the NIH and National Science Foundation to create new policy. The USDA does a lot of interagency work and our scientists.

DFO Lewis went on to acknowledge Ms. Donnell Brown. And her question was for Dr. Spiro Stefanou, and it relates to a follow up from an earlier conversation we were having about the trend line of public research going down in terms of dollars and how is ERS supporting that work for the agency broadly in terms of, demonstrating value of the of the research that's done publicly?

Dr. Stefanou answered by stating that ERS has a very strong program on science policy and looking at research and development in public sector for agriculture. We lost that capacity with the relocation we are in the process of building it back up. He went on to comment that research and development is standing on the shoulders of the public work and development monies add value to productivity in the workplace. One of the things you can see as you see the productivity

of us agriculture has been climbing very nicely over the last 60 plus years. And you see our use of inputs is flat, over time, we're using less labor over time. And so clearly innovation is taking place their capacity of the of the public system is certainly adding value their private system does as well. So that's just to say, he did not know the answer.

DFO Lewis thanked the board members on our leadership thank you for a robust discussion, appreciate and making this Board's this time and again your attention in making this board and its questions it's feedback, a priority and more to come, we will be continuing to collaborate with you throughout the year, and in the years to come in both formal programmatic and informal ways we hope, but thank you so much.

The Board and its guests took a lunch break.

<u>Virtual 'Whiteboard' of Board Big Picture Recommendations and Thoughts on Leadership Panel Discussion</u>

DFO Lewis welcomed everyone back after the break. She reminded the group that one of the requests that she made was for the board to reach out to the various stakeholders that they represent to get some information that you can bring to USDA about any additional things that our research areas can be doing to better represent your stakeholders' priorities.

DFO Lewis stated that she was going to fade into the background and turn the meeting over to the NAREEE Advisory Board Chair Dr. Buckner.

With the guidance of Dr. Buckner, the board spoke at length about what was areas of importance they wanted to get across to the leadership. One recommendation is that as a Board of academics, stakeholders, and industry should be an influence on how and what is funded. A large part of the Board represents 1862, 1890, and 1994 land-grant universities and have the responsibility for research and extension and they all have historically been underfunded. So, to see a trend that funding will not be given for research and extension across the boards is concerning and leads the Board to believe that they should also be a part of how the budget is allocated for research and development by being a part of the discussion. Also, the consideration of individual investigator awards, especially from NIFA are critical to development of our faculty through promotion and tenure and when we think of how important that is in terms of building the infrastructure moving forward. The next generation needs training and to do that there has to be an increasing the amount of those awards which would lead to better science. NIFA needs to work in the context of what the NIH is currently funding (\$170 million), but obviously missing in there is this component to food intersection. NIH is working in the same space that we need that connects to consumers, but there is no funding to help when there is a major point where when this is about the Nation's health. A third recommendation is that NIFA and REE should make data more accessible to a broader community of scholars to facilitate high quality research in agriculture. And lastly, scientific integrity within he panels needs to be addressed. The talent management and the "good old boys" network must be addressed because it is a systematic issue that starts with the pool of dollars at the top and works its way down. It truly matters who are on these panels.

Dr. Buckner asked that the REE Leadership's presentations be provided for the Board.

The discussion was then steered by Dr. Kenrett Jefferson-Moore, North Carolina A&T State University who wanted to know if their recommendations really influence USDA leadership? Mainly because she never remembers she doesn't the board being a party of the process.

Dr. Buckner answered that the relevancy, and adequate report is something where we can capture this. But then he asked DFO Lewis, and Ms. Morgan-Jordan how can we influence the leadership and is there an additional mechanism, other than our correspondence?

DFO Lewis answered that even though she is new she will do some investigating and see if there are new avenues or what they already do works.

Dr. Buckner stated that these comments will be grouped together and put into letter that we all agree on as a board.

DFO Lewis stopped the meeting to set up boundaries. Not wanting to throw cold water on the meeting but she wanted the board to know that hat comes out of this discussion is the formation of a committee that will create a letter. The letter creation cannot come from herself or Ms. Morgan-Jordan. DFO Lewis stated that she will certainly be involved to help keep the timetable moving forward and facilitate communication with the leadership team but must take a step back in terms of taking an active role in the development of the correspondence. DFO Lewis also agreed to research into any guiding principles the USDA has and examples pf correspondence that has worked well.

DFO Lewis and Ms. Morgan-Jordan applauded the Board for having all 15 members being present for the entire meeting. DFO Lewis stated that tomorrow is really where you work as a board with boots on the ground because there are several work products from prior boards and committees and subcommittees that are going to be presented to you for approval.

DAY #2: THURSDAY, FEBRUARY 10

Roll Call and Quorum Determination

DFO Lewis welcomed everyone back and ask Ms. Morgan-Jordan to take roll and establish a quorum. The following names of NAREEE Advisory Board members were called by Ms. Morgan-Jordan, and their response are given in italics:

- Dana Allen-Tully -no response
- Dr. V.M. 'Bala' Balasubramania no response
- Donnell Brown *present*
- Edmund Buckner *here*
- Richard De Los Santos here
- Mario Ferruzzi- no response
- Marguerite Green *no response*

- Liz Hobart *here*
- Kenrett Jefferson-Moore– present
- Jane Kolodinsky– present
- Mark Lawrence *I'm here*
- Annette Levi *I'm here*
- Mike Oltrogge– *I'm present*
- Ariel Ortiz-Bobea– *present*
- Tambra Raye Stevenson– present

A quorum was established, and the Board can conduct business.

DFO Lewis commented that yesterday was quite big picture and leadership level information sharing giving you a sense of who these individuals are at the helm of our agency in our research mission area, and how these various strategies to move USDA science and research forward. Day #2 will more of that in that will have some informational presentations that will inform our boards work, not just the committees and subcommittees but will inform our boards work on going forward for the fiscal year (FY).

DFO Lewis also made the board aware of Richard de los Santos's comments and that she will transmit them to the REE leadership team. In addition, Jane Kolodinsky asked a question that she asked to be submitted to the Deputy Secretary on the meat industry, and because the Deputy Secretary wasn't available yesterday, DFO Lewis sent the question via e-mail, and she replied. All this information will be sent to the board.

Hearing no questions DFO Lewis pivoted the meeting toward Dr. Buckner and Ms. Morgan-Jordan for old board business.

Old Board Business

- NGRAC Report – Safeguarding and Distributing Native Crop Wild Relative Genetic Resources of the United States – *The report was approved by the Advisory Board*.

Questions/Comments:

Donnell Brown - She that felt like the report was really timely because in the grape industry there has been lots of talk about genetic resources and germplasm repositories and the importance of those resources to the future of our industry in terms of finding traits and using trades from native sources that we might need in the future like drought tolerance disease tolerance heat tolerance. She was also pleased to see that characterization of the germplasm referenced in this document because it's really needed and hasn't been addressed to any large degree. And the other thing is that in California, there's been issues around funding for repositories and upkeep and maintenance and it was nice to see some funding directed toward these resources.

- NGRAC Report – Microbial Genetic Resources in the USA - *The report was approved by the Advisory Board*.

Questions/Comments:

Dr. Mark Lawrence commented that the use of these resources is important. And he notes that it is not exciting work, but it's critical. We all need it. And so, I think this this microbial document is really well written. But the only thing he would suggest is that the document talks about the information and curation and that aspect if anything could just use some strengthening linking to the genomic resources for all these strains and the curation is just critical, because there's hundreds of thousands of these strains in these collections.

Dr. McFerson answered that the electronic documentation, an active curation of that database is something that we're encouraging USDA to invest more into, and that'll come out in the report it will discuss next.

A question was raised by Dr. Buckner about curation and collections at land grant universities, and what is your thinking about supporting or asking for support for university-based collections, along with the artist?

Dr. Margaret Smith answered that she doesn't think the USDA is going to be in a position to say okay we're going to we're going to pull these all under our umbrella they probably don't have that level of resources but thinking about a model for how to try to make sure there's ways to link the information about these things, even though they're in those disparate places is probably where we need to go.

- Diversity and Inclusivity Letter – An ad hoc committee was formed to draft and revised letter; Ad hoc members: Tambra Stevenson, Jane Kolodinsky, and Mike Oltrogge.

Questions/Comments:

Dr. Oltrogge wanted to ensure that the updated letter included all of the land grant partners in it (i.e., 1994s 1862sm HSIs).

Dr. Jefferson-Moore wanted to bring everyone's attention to the Forbes article that was released on February 1 regarding the amount of underfunding that goes to the historically black 1890 land grants. Dr. Buckner asked if she could share that article with the Board and she agreed.

Ms. Stevenson gave comments and stated that I had an opportunity to review the letter and she is glad we have an opportunity to have a conversation about it before it moves forward. She feels that given her role in representing consumer interest that there is an opportunity to include some key recommendations and in the use of language in, and I can follow up in an e-mail them as well, but I just wanted to go through quickly, and highlight some of the thoughts I saw that there were four recommendations, at least in the letter that I had received. And so, with the conversation yesterday, around the new role of nutrition security, that is coming on to USDA, I think that first line when it talks about research and ensuring Food and Nutrition security is

important. Having worked and lived in DC where we have urban agricultural focus, I think having urban and rural recognizing the geographic geographical disparities and food apartheid. And with that, I thought I kept thinking about numbers, even in the language about when it talks of how to describe the communities. We know place-based matters, so zip codes have been well documented in predicting, life expectancy outcomes. She goes on to state that the use of current language should be used when talking about why this diversity, equity piece matters given the history of red lining.

She goes on to mention that she wanted to think through the data that was mentioned that she saw missing and thinks the Forbes article being mentioned would fit nicely to back up our comments with any kind of data that highlights why this discrepancy between universities matter and need to be addressed. Also, when it came to the next generation I thought, use of language was important, of, of maybe seeing recruit and retain with a culturally centered approach to underrepresented minority represented underrepresented minorities in steam fields, again, recognizing that we're moving from stem to steam. Lastly, this was outside of the scope of the four recommendations, but she wanted to see how they can be implemented in some way. This use of Human Centered Design helps to think through the program development the products the people and the promotion of these programs, and there should be in an essence of cross cutting framework that connects to this work just as equity as a cross cutting principle. How can we think culture in communication, and any other piece as a cross cutting issue that matters to this work? Again, she emphasized her recommendation to consider upgrading the language stating that we are no longer at least in our Food Policy Council we're not using food deserts anymore its food apartheid to have a proper diagnosis is critical as a doctor to give a proper prognosis. Also, she emphasized again that the investment of communicating, we in the scientists contend to communicate to ourselves but if we're not communicating to key stakeholders, none of these matters so I like that equity commission was mentioned she would like to see is there any way that at some point we interact with key conditions that are in alignment with the work and agenda that we want to advance. Ms. Stevenson is also looking at what is the collection of data on academic nutrition programs and the workforce loan repayments for nutrition and those who have salary discrepancies that I hear that their voices are not being captured, who are in the field of nutrition, dietetics and they're crying out for help, and she does not see how the government is not aware of these issues. Ms. Stevenson also wants to look at how can we give advice or recommendations about working with the entertainment industry and changing the narratives of how people of color have been misrepresented with disinformation campaigns around agriculture and nutrition.

Ms. Morgan-Jordan made a comment to Ms. Stevenson asking her to perhaps write out all other recommendations in bullet for and submit them to the board.

Dr. Buckner agreed with Ms. Morgan-Jordan's recommendation and went on to comment that Ms. Stevenson, Dr. Mike Oltrogge, and Dr. Kolodinsky.

Dr. Buckner_went on to state that those are insights from Ms. Stevenson were appreciated because he had not thought about racism issues as it relates to nutrition and the equity and metrics.

DFO Lewis answered a question from Ms. Stevenson on the deadline for the letter to be completed. And she answered that there is no specific deadline for this letter.

- Ad hoc committee on Agriculture Extension Programs (status, discussion, and next steps) - The Advisory Board agreed to table the discussion of these programs after board has had time to study over the historical documents.

Questions/Comments:

DFO Lewis noted that this Ad Hoc committee was something of an enigma for her. She inherited all these projects when she took over as executive director. And as she understands it the discussion about setting up an ad hoc committee to look at the future of Agricultural Extension Programs was discussed at the July 2020 Board meeting, and she found this discussion record that morning as well as the board meeting transcript and about three pages of discussion. Therefore, she did not find it early enough to add it to the virtual binder. So, there was discussion about this effort, there was an ad hoc committee that was pulled together she believes but is not certain.

Dr. Buckner asked the other board members their thoughts on the matter and the board agreed that to table this discussion after they have had time to study over the document.

- Relevance and Adequacy (R&A) of 2020 Ag Climate Adaptation Report (discussion and next steps) – The next steps taken will be recommendations from the four key areas found in the USDA's strategic plan.

Questions/Comments:

DFO Lewis and Dr. Buckner decided to adjust the agenda to reflect that later presentation about the board's last relevancy inadequacy report (that's occurring at 3:30, Eastern), which, considering the project the board will have on their plates this year.

Ms. Liz Hobart, GROWMARK, Inc. had a comment in which she stated that she couldn't recall a lot of the discussions so it would be very helpful to have some of that past information whether it's the transcript and the draft letter that perhaps is something that could be considered as one of the topics and depending how in depth that is.

Dr. Buckner commented that he thinks the board should continue to keep the report in relevancy and adequacy, but he asked where does the report go? Dr. Buckner went on to ask Dr. David Baltensperger to give any historical perspective.

David Baltensperger commented that he was happy to clear up any missing information. But essentially, the notes from the last meeting the board had developed a relevancy and adequacy report that the 2022 board will be reviewing and each year we tried to look at a relevancy and adequacy from a total NAREEE standpoint.

Dr. Buckner thanked Dr. Baltensperger and stated that if Dr. Baltensperger thought it was important enough to look at when he was chair then Dr. Buckner believes that it is still sufficiently important.

New Business

The Advisory Board FY22 Projects - Committee/Council/Subcommittee Updates and Forecasted Updates.

- Pollinator Subcommittee, Ms. Elizabeth "Izzy" Hill, USDA Honeybee and Pollinator Research Coordinator – *Advisory Board gave positive feedback*.

Questions/Comments:

Dr. Buckner commented that he enjoyed the presentation, and that pollinator research and priorities are something that we're all concerned about.

Ms. Donnell Brown wanted clarity on the intent that you'd like to form a committee on pollinator health?

Dr. Izzy Hall answered that this is going to specifically be a subcommittee under the NAREEE board, and so there are two purposes to this. The first is that her proposed subcommittee is seeking input on the the proposed research priorities should be for not just the year but also long term for pollinator research, and the second component is that the proposed subcommittee will be asking for assessments of the best available science that's available, or if it's not available, what would be needed to best support, in terms of our policy and programs.

DFO Lewis went on to state that this proposed subcommittee and the proposed research priorities and as it relates to this Federal Advisory Committee and the NAREEE board is not an ask and this is not being put up for vote for approval.

DFO Lewis pivoted into the second part of the new business presentation by introducing the next items for business which are three committees and subcommittees. DFO Lewis invited the chairs of the three committees and subcommittees for our next part of the agenda, so the board can hear from them, and everyone can get to know everyone a little bit better.

- Citrus Disease Subcommittee (CDS), Mr. William "Gee" Roe III, W.G. Roe and Sons, Chair – Nov 2021 Public Meeting Minutes and the Subcommittee's NIFA ECDRE Program RFPA draft feedback submitted in Dec 2021 - *The report was approved by the Advisory Board*.
- Specialty Crop Committee (SCC), Dr. Gregory Goins, North Carolina A&T University, Chair Jan 2022 Public Meeting Minutes with NIFA's SCRI Program *The report and minutes were approved by the Advisory Board*.
- NGRAC, Dr. Jim McFerson, Lead Recommendations Author Oct 2021 Meeting Minutes and the Council's January 2022 ARS NGRP Plan recommendations *The report and minutes were approved by the Advisory Board*.

DFO Lewis thanked the board for their work to approve the three items up for approval under new business. She went on to introduce the next speaker, Bayard Brewin. She explained that he is going over the results of the survey that some of the board members participated in right before the holidays.

Board and Committee/Subcommittee Member Survey Key Learnings, Bayard Brewin,
 Sage Communications, LLC – Overview and Questions and Answers

Mr. Brevin asked the board their thoughts on how to reach a broader and younger audience.

Dr. Liz Hobart answered that she doesn't believe TikTok is a way to do outreach because she has two 20 something daughters that use Tick Tock and they're usually looking for something, amusing.

Dr. Ortiz-Bobea commented that he sees LinkedIn is probably a better source for working professionals in our area and he personally uses Twitter. And he knows of a big community of academic economists and industry and people in industry that are on Twitter, his main way of communicating with people outside the building where he works.

FY 22 Relevancy & Adequacy Project Overview and Steps Towards Developing R&A Report - USDA's FY22 Science Priorities and/or Science Strategy, Ms. Holly Wiggins, USDA Strategic Planning, Program Evaluation & Enterprise Risk Officer Relevancy & Adequacy Committee initiation and outline of next steps

DFO Lewis welcomed Ms. Holly Wiggins from the USDA Strategic Planning, Program Evaluation & Enterprise Risk Officer. DFO Lewis explained that every year the board looks at one of USDA's REE's priorities. The board looks at the relevancy of a science priority and the adequacy of the priorities' findings in a particular FY. The document was finalized in 2020 and it wasn't transmitted. With that information DFO Lewis introduced Ms. Holly Wiggins gave a presentation on the draft USDA Strategic Planning Framework. She also presented on OCS's five theme teams: (1) Climate; (2) Sustainable Agriculture; (3) Food & Nutrition; (4) Innovation; and (5) Science Policy. Ms. Wiggins noted that the work is not done its just transitioning due to the change in leadership. And she also presented what is on the horizon and asking the board to look for gaps Holly also outlined what happens to the board's product

DFO Lewis asked if there was a date for the strategic plan to be released.

Ms. Wiggins answered that that is the million-dollar question and they do not have a date, Holly hopes it will be March.

Ms. Donnell Brown made a comment that on day #1 she wondered where OCS got their priorities from, and that Ms. Wiggin's presentation answered her question.

DFO Lewis stated that Ms. Wiggins provided one option about getting that work product particularly since it had been approved by the board back in 2020, providing it to you so that it can be provided to the team for reevaluation.

Ms. Wiggins answered yes, Dr. Mehta is also convening a climate Strategy Team for the missionary. It kicks off on the 24th and it will be comprised of the climate theme team, and the Office of the Chief Economist climate Strategy Team. And those two groups will come together to talk about key areas that maybe you need some additional thought leadership and focus on whether policy or programmatic or research strategy. Ms. Wiggins commented that she would love to do it if we had it cleared and we can share it and get it into Dr. Mehta's hands as well.

Liz Hobart: And maybe as a part of that, I guess the one thing that I would like to ask them of the team is as they look at this you know this was done in 2020. I think climate is still extremely relevant topic and will continue to be in years to come. So as they review this based on what the NAREEE board did in 2020, what are some of the additional questions maybe that they can pose back to us that we can provide input that has maybe changed since 2020.

Ms. Wiggins made a note of Dr. Hobart's comment and thanked her.

DFO Lewis has also made note based on Ms. Wiggin's suggestion to reach out to our Deputy Undersecretary Dr. Mehta about putting this document in her hands as well. DFO Lewis wanted to make sure this was okay with the board as well.

Dr. Buckner commented that he wanted to piggyback off what Dr. Hobart mentioned. He stated that even though he wasn't on the committee to create the report he knows that an incredible amount of work went into the document and that's evident by just taking a quick read of it, because it's not a quick read and it's something that does need to not sit on a shelf it needs to move forward, and we need to make sure that we're doing that.

DFO Lewis stated that she is excited by the board's discussion and the forward-looking progress. She commented that this conversation answers another question that board members have and that is a position to discuss today what our board's relevancy and inadequacy effort looks like for FY22. She also mentioned the pending release of USDA science and release and research strategy and what does the board's relevancy and inadequacy effort look like in FY23. So, could that be a topic kind of for 2022 to kind of finalize that piece of it, recognizing that the climate piece may has already been approved. Lastly, she stated that perhaps the extension piece is something that we could kind of focus on as an interim piece if that would be appropriate.

Ms. Wiggins stated that you might find if we get the strategic plan, released soon, that as you go through it, there might be some things that jump out to you as well. I really hope it's not but if I really hope it is soon but if not, the extension would also be fantastic.

Ms. Wiggins stated that as soon as she gets the strategic plan she is shooting it to DFO Lewis and hopefully that will be at the end of this month.

Dr. Buckner commented if it might be available at the end of the month then maybe the board can discuss it and our next board meeting.

Ms. Wiggins replied that she is not sure when it will be released, but she will communicate with Kate, because it really has held up a lot of things for the organization.

Dr. Buckner asked that since Ms. Wiggins cannot release the details is she could give the board a little insight as to what the strategic plan might say or whole for extension translating that research into usable knowledge for landowners and practitioners.

Ms. Wiggins replied that she would need to go back and look at some of the language and maybe come up with a paragraph or two with some bullets and share it with DFO Lewis to share with the board.

Ms. Wiggins asked DFO Lewis when next board meeting is.

DFO Lewis answered that the date is to be determined, but she feels like November 2022, and perhaps in person. She commented that the board can get together in an effort to be nimble and timely to move forward on this or any of the other high-profile actions that will come out of the two days, and we could find a time to zoom for an hour or 90 minutes just as a check in on some of these things that's just going to be determined by our joint availability. Going forward in the next couple months. She added that the board also has executive committee calls that doesn't include the entire board, but we will be setting up a periodic executive committee.

Dr. Buckner added that the board used to have monthly meetings/calls. He then suggested that he would like to pull the board together to for an occasional hour-long meeting or 45-minute-

long meeting to address one topic. He then asked the board would they be open to that prospect and he could make himself available. Several people indicated on zoom screen and via zoom chat that they would be open to brief meeting depending in their schedules.

DFO Lewis thanked Ms. Wiggins for her presentation that was quite enlightening and is helping the board figure out how they move forward with the board's relevancy and adequacy efforts.

Ms. Wiggins thanked the board for having her. And that the board's questions helped her understand a little bit more how the USDA could partner with the board over the next few months. Ms. Wiggins also shared that she may circle back to DFO Lewis and see if the board wants to circulate some things that are evolving as well.

DFO Lewis headed back to the agenda and noted that she doesn't believe that the board is in a position to ask for a committee to be initiated at this point in the process. But DFO Lewis turned the meeting back over to the board for discussion.

Dr. Buckner answered that he liked looking at the strategic plan and plans to see how the strategic plan meshes with extension. He believes that the board needs more information before moving forward.

DFO Lewis added that she wants the board members to know that you can count on Ms. Morgan-Jordan and herself to move this part forward. She then asked the board if it would be okay to move the current document forward.

Dr. Buckner polled the board and asked the board if any of them had a problem with DFO Lewis and Ms. Morgan-Jordan moving forward with the Agricultural Climate Adaptation document.

Dr. Ortiz-Bobea spoke up and commented that he has not had enough time to review the lengthy report. And he asked if the board could have a little more time, a week or so to give the new board members especially time to review it.

Dr. Buckner asked Dr. Ortiz-Bobea is he would like DFO Lewis and Ms. Morgan-Jordan to hold off for about a week until the board can get comments in on the report and then move forward, depending on the comments.

A Dr. Ortiz-Bobea replied that he would appreciate that.

Dr. Buckner then polled the rest of the board and they all agreed to wait.

Ms. Brown asked what DFO Lewis meant when she said they would "Push the document out?"

DFO Lewis answered that that is when the board specifically approves the plan and then she would provide it to Ms. Wiggins. And then get the board's approval for Ms. Morgan-Jordan and DFO Lewis to send it to our Deputy Undersecretary. DFO Lewis state that she didn't want to overstep, but she believes that Dr. Ortiz-Bobea's request is fair. She suggested a 10-day timeline for anyone on the board to provide any additional comment to that board deliverable that was approved. The board members can just e-mail DFO Lewis and Ms. Morgan-Jordan and then develop a process to share them with Dr. Buckner.

DFO Lewis went on to suggest that after all comments have been submitted perhaps a memorandum could be drafted before the report is transmitted within USDA. Dr. Buckner agreed and the memorandum would be signed by him and the vice chair.

Public Comment

No public comments were made.

Next Board Meeting Forecast / Meeting Closing Remarks / Adjourn

DFO Lewis commented that over the course of the two-day meeting you have heard her, and Ms. Morgan-Jordan discuss the next big board meeting. And hopefully our next big meeting will be in person.

After much board discussion of dates DFO Lewis concluded that a doodle poll sent for the timeframe would be better for the board and also give the board a chance to go through their emails and see when they have major meetings.

DFO Lewis reminded the board that the USDA has opened the nomination period for new and or reappointed NAREEE board committee and subcommittee members. If the board has any questions about their terms, let Ms. Morgan-Jordan and DFO Lewis know as soon as possible.

The nomination period was opened early this year so that so that the USDA could get the word out about opportunities to serve on the board and committees and so people didn't have to wait to the last minute to submit their nomination materials. More information regarding the nominations, or renominations will be sent out over the next couple of weeks and months. There will be 15 vacancies total.

Lastly, DFO Lewis asked for feedback on this meeting so they can improve their process. The board can e-mail DFO Lewis, Ms. Morgan-Jordan or Dr. Buckner (they can remain anonymous).

The meeting was adjourned.

APPENDIX A: LIST OF MEETING ATTENDEES

DAY#1: WEDNESDAY, FEBURAY 9, 2022

NAREEE Advisory Board Staff: Kate Lewis and Shirley Morgan-Jordan

NAREEE Advisory Board Members: Ariel Ortiz-Bobea, Kenrett Jefferson -Moore, Liz Hobart, Dana Allen-Tully, Donnell Brown, Edmund Buckner, Marguerite Green, Tambra Stevenson, Mario Ferruzzi, Mark Lawrence, Mike Oltrogge, Jane Kolodinsky, Vasudevanallur Muthiah Balasubramaniam, Annette Levi, and Richard De Los Santos

Other USDA Staff: Carrie Castille, Chavonda Jacobs-Young, Dionne Toombs, Hubert Hamer, Spiro Stefanou and Shefali Mehta

Members of the Public: Michael Larsen, Rachel Owen, Rich Derksen, USDA, Simon Liu, Tara Weaver Missick, Terrance Bailey II, William Trenkle, David Baltensperger, Russellie Bongolan, Sanah Baig, Sanjay Gummalla, Jim McFerson, and Bayard Brewin

DAY #2: THURSDAY, FEBRUARY 10, 2022

NAREEE Advisory Board Staff: Kate Lewis and Shirley Morgan-Jordan

NAREEE Advisory Board Members: Ariel Ortiz-Bobea, Kenrett Jefferson -Moore, Liz Hobart, Donnell Brown, Edmund Buckner, Marguerite Green, Tambra Stevenson, Mario Ferruzzi, Mark Lawrence, Mike Oltrogge, Jane Kolodinsky, Annette Levi, and Richard De Los Santos

Other USDA Staff: Elizabeth "Izzy" Hill and Holly Wiggins

Members of the Public: Jim McFerson, Terrance Bailey II, Gregory Goins, Elizabeth Sellers David Baltensperger, Diana Cox-Foster, Margaret Smith, Grace Kunkel, Carrie Eberle Danielle Downey, Ralph Grundel, Paul Gepts, Steve Cook, Danielle Downey, Terry Griswold, Chris Hiatt, Laurie Davies Adams, Johanne Brunet, William "Gee" Roe III, and Jeff Baldwin