WISCONSIN DAIRY TASK FORCE 2.0 SUB-COMMITTEE ON RESEARCH AND INNOVATION MINUTES

November 5th, 2018

The Research and Innovation Sub-Committee of the Wisconsin Dairy Task Force 2.0 met on Monday, November 5th, 2018 beginning at 10:00 a.m. at the University of Wisconsin-Stevens Point in Room 223 of the Dreyfus University Center, 1015 Reserve Street, Stevens Point, WI 54481.

Call to Order

Sub-Committee Chair Chad Vincent called the meeting to order at 10:02 a.m.

Members Present

Chad Vincent, Rob Byrne, Shelly Mayer, Andy Buttles, Steve Bechel, and Ted Galloway.

Also present were Mark Stephenson, Neil Kline, Kent Weigel (Chair of the Department of Dairy Science at UW-Madison), Dr. John Lucey (Director of the Center for Dairy Research, UW-Madison), and Jeff Buhrandt (University of Wisconsin System).

Minutes

Welcome and Introductions

Members of the sub-committee introduced themselves.

Dr. John Lucey presented to the group. After reviewing the current situation in the dairy industry, Dr. Lucey discussed the current position of the Center for Dairy Research (CDR). Noting that CDR is primarily funded by dairy farmers via the check-off program, Dr. Lucey highlighted the challenges facing CDR. These include:

- Lack of State/UW support (4% of CDR's operating budget)
- Lack of UW Extension support for dairy foods
- Lack of faculty doing dairy food research
- Dairy Farmers of Wisconsin funding is for staff, not research, and CDR relies on competitive grants from Dairy Management Inc. (DMI) for the majority of its research funding.
- Many demands of CDR staff time to assist the industry, with less time for long-term research.

Dr. Lucey outlined CDR's strategic plan's 4 goals, which are:

- To become the world's leading provider of dairy foods education/training(transferring insights to industry) (train next generation of dairy leaders)
- To conduct excellent quality dairy research that provides solutions to industry problems or generates new knowledge
- To provide expert product development and technical services to the dairy and food industry
- To support entrepreneurship and startups related to dairy/food (TURBO) (leveraging business & economic development partnerships)

Dr. Lucey then highlighted challenges for dairy manufacturing.

- Need for increased dairy food research
 - International competitors are investing in dairy processing research and innovation.
- Unnecessary regulatory barriers to innovation implementation
 - o Example: ultra-filtered milk
- Adequate supply of trained workforce

Dr. Lucey mentioned the importance of enhancing sustainability in dairy manufacturing before transitioning to discussing possible opportunities to add value or take in additional volume, as well as other ideas. These include:

- Product Innovation
 - Specialty cheese
 - Improved functionality
 - Nutritional ingredients
 - Uses for by-products
 - High protein snacks
 - Products for export
 - o Products made with blends of other proteins
 - New cultured products
- Process Innovation
 - Filtration technologies
 - New cheese making approaches
 - New dryers
 - Fermentation technologies
 - Sensors and controls
 - Use of big data
 - o Non-thermal processes (high-pressure, etc.)

List continued on next page...

- Other Ideas
 - o Tackle Big Challenges or Big New Ideas
 - Designer Milk (enhanced with a minor protein, or reduced allergenicity, etc.) (consumers are interested in A2 milk)
 - Collaboration on topics linking milk production and product side (prohibited by checkoff)
 - improved milk quality
 - sustainability
 - impact of diet on product quality/nutrition
 - Leverage world-class UW campus experts to help with dairy (e.g., engineering, fermentation, big data, genomics, etc.)
 - o Fellowship program supporting dairy science (both production/products)
 - o A University Park space for dairy/food startups to support entrepreneurship
 - Using the ethnic communities at UW to study/understand consumer insights in key export markets

Kent Weigel then presented to the group. After reviewing the various options before the Wisconsin dairy industry (Get big, Specialize, or get out), Dr. Weigel mentioned another option that would allow for the economic impact of dairy to continue to be wide-spread while also allowing the industry to remain competitive. The model is outlined in an academic paper he distributed to the group titled "Learning from the future-A Vision for dairy farmers and cows on 2067" by J.H. Britt and others.

Dr. Weigel then transitioned to talking about the role UW-Madison can play as a research and development hub, and he introduced to the group the UW Dairy Innovation Hub. A proposal for additional state funding for dairy research developed jointly by Professional Dairy Producers of Wisconsin (PDPW) and the UW System, the plan calls for investment in R&D at UW-Madison, UW-Platteville, and UW-River Falls. The plan has four distinct areas, Steward Land and Water Resources, Ensure Animal Health and Welfare, Grow Farm Businesses and Communities, and Enrich Human Health and Nutrition.

The remainder of the morning session was spent discussing the UW Dairy Innovation Hub proposal.

Lunch

The committee broke for lunch at 11:53 a.m. and reconvened at 12:10 p.m.

Following lunch, the group spent 10 minutes of individual work time to combine the issues from the August Meeting into clusters. They are listed below:

- Product Innovation
 - Explore niche export markets
- Tech/Process innovation
- Collaboration between Industry, Processors, UW, Farm—break down silos
 - Pull the right people, groups, and assets together for holistic solutions with a mindset to competing. Pull the dairy industry together and forward. Maximize Wisconsin's competitive advantage.
 - o Checkoff dollars cannot be used for on-farm production research only for products, processes, marketing (this contributes to current silos).
- Research leading to consumption of WI Dairy
 - o How to continue to make investments to be dairy's world class research hub.
- Talent
- Funding
 - Leverage current (check-off and others)
 - Extension
 - Government funding
 - How to keep UW funded for much needed research, people, and facilities.
 People assets, dairy is vital to state—how to get people funded.
- Consumer/Research Insights
 - Ensure we have consumers at the center of plans and future—ensuring market for Wisconsin dairy products.
- Answering future/unknown problems
 - o Research
- Sustainability
 - Research to make sure we are at the forefront of dairy sustainability and animal treatment.
- Exports (innovation)
 - Develop products for new markets, here and abroad. Be preferred world supplier of dairy—quality and food safety.
- Expertise and knowledge hub
- Competitive advantage
 - o Knowledge
 - Water
 - o Environment/climate
 - o Infrastructure
 - UW assets/tools/people

The group then moved to discussing solutions to the issues identified. The list is below:

- Better Market CDR's capabilities and figure out additional funding sources.
- There is a need for UW dairy research funding ASAP. Fund via UW Dairy Innovation Hub plan.
 - o Build industry support with education of key decision makers and supporters.
- "Cluster funding" for collaboration within the UW System.
- "Clearing house" for collaboration.
- Fund the bold research that drives Wisconsin's future.

The group selected February 8th, 2019 as the date for its next meeting and renamed the subcommittee as the Research and Innovation Sub-Committee.

The sub-committee also scheduled a teleconference for 9 a.m. on November 19th, 2018 to consider the UW Dairy Innovation Hub proposal for expedited recommendation to the full Task Force at the December 13th, 2018 meeting.

Adjournment

The Sub-Committee adjourned at 1:47 p.m.

Minutes drafted by Neil Kline.

Minutes approved by the Sub-Committee during November 19th, 2018 teleconference.