

Minutes
Meeting of NCAC6
January 21, 2026

The committee met via Zoom videoconference on January 21, 2026, at 9:00 am. CST with outgoing administrative advisor Gary Pierzynski (OSU) and incoming administrative advisor Rodney Johnson (Illinois). NCAC6 members present were Teresa Douthit (KSU), Paul Ebner (Purdue), Catherine Ernst (MSU), John Jaeger (SDSU), Pasha A. Lyvers (OSU), Jason Ross (ISU), Guillermo Scaglia (NDSU), Dan Shike (UI), Michael Schutz (UMN), Deborah Van Overbeke (UNL), Bryan Wiegand (MU). The meeting was chaired by Pasha A. Lyvers, Chair. Michael Schutz, Secretary, recorded minutes of the meeting.

After self-introductions, Gary Pierzynski updated those in attendance about a few administrative items. First, he reminded that the National Association for Agricultural Experiment Station Directors has recently changed identity from NCR to agInnovation, or agInnovation North Central for this region. The divisions of agInnovation include NC, W, S, NE and a section for the 1890 universities. Thus, the two 1890 institutions in the NC region are part of their own national group. Besides oversight of the regional projects, agInnovation partners with the Association of Public and Land-grant Universities (APLU) to advocate for research funding and policy through the agreement with Lewis-Burke Associates. Second, a major task of NCAC's is to approve new, midterm, and renewal projects in the system. NCAC6 reviews are due February 17, 2026, following review by project academic advisors which were due in December. AgInnovation will review projects in March before they go to USDA for final approval. NCAC6 is also responsible for filing a report of their annual meeting, electing officers, and deciding how and when to meet in the next year (meetings can only be authorized after filing of the annual report of the previous year). State reporting by members is encouraged. [Note: NCAC 6 participants often share local updates when we informally meet as a national group of Animal Science Department Chairs]. Rodney Johnson will assume responsibilities as academic advisor to NCAC6.

Gary further reported some updates from USDA.

- AFRI responsiveness and AFRI due dates were heavily impacted by the federal government shutdown in fall 2025.
- The bill that reopened the government included USDA funding.
- The notice of funding opportunities and timelines has not yet been announced for 2026 and is expected sometime in spring.
- Research Facilities funding was provided in the Big Beautiful Bill passed by Congress over the summer. However, information has not yet been released with regard to the number of requests per institute, required cost shares, or funding levels.
- A new staffing plan for USDA was created right before the shutdown. It remains unclear when activity will resume, but plan is for much of USDA to move out of Washington DC Metro, as was done with the move of NIFA to Kansas City, MO.

- USDA secretary Rollins has identified new priorities. Much is similar to previous lists, but language is different.
 - Focus is on goal-driven research with real world impact
 - Decreased opportunity for interesting research with no defined outcomes
 - Increased funding for research with next generation technology (e.g. Big Data, Artificial Intelligence) as drivers.

The committee proceeded to review NC multi-state projects.

NC1029 (NC_temp1029)

The revision of ***Applied Animal Behavior and Welfare*** was reviewed by Jason Ross (primary) and Teresa Douthit (secondary).

Objectives:

1. To develop novel behavioral and physiological indicators of animal welfare or apply existing measures to generate novel knowledge or applications.
2. To strengthen the scientific basis of applied research, on-farm and industry assessments and standards, and stakeholder engagement related to animal welfare.
3. To investigate animal behavior across relevant species, contexts, and life stages as a means to generate new knowledge related to species-specific animal welfare needs.

The proposal was reviewed under Appendix H review criteria as a Mid-term review. The project has a long tradition of success through previous versions and includes many key researchers in animal welfare. The justification is strong and animal welfare continues to be a growing issue. The approach is not species-specific in this proposed project. A strength is that participants have identified the need to bring increasing scientific rigor to this field of research. Methods are described well; the researchers have been very productive; the work spans the US; and there is good attention to public engagement and a process to achieve it. It was noted that there was evidence of inter-institutional publications and grants. However, it was unclear whether there is a clear plan for creating larger impact of collective synergies of working at a national level.

Jason Ross moved to recommend acceptance, seconded by Paul Ebner. Motion passed by unanimous vote.

NC1192 (NC_temp1192)

The renewal of ***An integrated approach to control of bovine respiratory Diseases*** was reviewed by Bryan Wiegand (primary) and Paul Ebner (secondary).

Objectives:

1. Elucidate host-pathogen-environment interactions underlying respiratory disease and associated disorders in livestock
2. Develop and validate diagnostic and surveillance methodologies for respiratory disease in livestock
3. Develop and assess sustainable management, therapeutic, and preventative interventions for respiratory disease in livestock
4. Characterize and model system-level, economic, and societal drivers of respiratory disease in livestock production
5. Translate collaborations and knowledge of respiratory disease research into practical applications

The proposal was reviewed under Appendix H review criteria as a renewal of an existing project. This is a renewal of a long-standing project focused on bovine respiratory disease, mainly in beef cattle. There appears to be changing leadership and participation with several new members and only a few long-time participants. Updating of objectives was evident. Inclusion of work on beef on dairy crosses was viewed as a strength. The timeline is aggressive but achievable. Work in this area is needed. It was sensed that there may be some mission creep to work on other diseases, possibly overlapping other NIMSS projects. Nevertheless, this is seen as a successful project that should be renewed.

Paul Ebner moved to recommend acceptance and Bryan Weigand seconded. Motion passed by unanimous vote.

NC1211 (NC_temp1211)

The renewal of ***Precision Management of Animals for Improved Care, Health, and Welfare of Livestock and Poultry*** was reviewed by Mike Schutz (primary) and Jason Ross (secondary).

Objectives:

1. Develop, integrate, and validate sensing and automation technologies
2. Advance data science and artificial intelligence approaches for multimodal PMA/PLF datasets
3. Evaluate adoption, usability, and the economic and welfare impacts of PLF systems
4. Promote data interoperability, cybersecurity, and workforce development for PLF systems

The proposal was reviewed under Appendix H review criteria as a renewal of an existing project. Precision Management of Animals remains a relatively new field, and the participants in this project are leaders in this emerging field. The issues and potential are stated very well. A clear case is laid out of the success of the previous committee, and why continuing this work is important, along with the leadership of the NC region and

collaborators across the US. Perhaps a weakness in this project outline is the lack of summary of current and past work of the committee. Overview of previous accomplishments for Objective 1 and 2 were not clearly summarized. This has been a very active committee that has made excellent progress and showcased its work with at least two national conferences. While the ways proposed work meets national priorities could be described more specifically, the connection to USDA and multi-state research efforts is clear. The proposal differentiates its aims with projects S1074, NC1181, NC1029, and NE2442; no consequential duplication is noted. Objectives have been revised, including the entirety of objectives 3 and 4, which indicate advancement in the field of PMA. Those working on each objective are detailed in the Methods section. Objectives are broken into sub-projects, and multi-state participation is designated in each of these sub-projects. Interdependence, however, is not well-portrayed in this project and description of objectives fails to make the case for multi-state approaches to conduct the work proposed. Outputs and outcomes are clearly delineated. Milestones make mention of multi-institutional trials, but those are not described in any detail. The committee is encouraged to provide stronger specification of true multi-state efforts and to provide an overview of previous accomplishments for Objective 1 and 2.

Jason Ross moved to recommend acceptance and Mike Schutz seconded. Motion passed by unanimous vote.

NCERA219 (NCERA_temp219)

The renewal of ***Swine Production Management to Enhance Animal Welfare*** was reviewed by Cathy Ernst (primary) and Mike Schutz (secondary).

Objectives:

1. Conduct applied production research using precision livestock technologies, sensors, and data analytics to enhance producer decision-making and improve animal performance, efficiency and profitability of swine systems.
2. Refine management practices through collaborative research that positively influence swine health, livability, and welfare to improve overall herd well-being and farm productivity.
3. Develop and deliver educational materials and extension programs for swine producers and allied industry professionals focused on farm data management, privacy and security.
4. Develop, extend, and promote diverse educational resources of scientifically validated management practices to improve pig performance and swine production efficiency through multiple delivery platforms.

The proposal was reviewed under Appendix J2 review criteria as a renewal of an Extension and Research Activities (ERA) project. The project has a long history of bringing together participants

with expertise in swine production and Extension education to conduct multi-state applied research and deliver educational materials and decision tools to swine producers, veterinarians and industry professionals. Previous efforts of this committee included development of the SowBridge Breeding Herd Educational Series, which has been a very successful virtual education platform for project participants to deliver information directly to breeding herd personnel in the swine industry. The objectives for the renewal project focus on current challenges faced by the swine industry including labor shortages, herd health, production efficiency and integration of emerging digital technologies. The goals and objectives are clearly stated. The project addresses an important topic area for the swine industry, and the ERA mechanism is appropriate for coordinating experts in swine production to provide solutions and enhance decision-making for swine producers. However, the project proposal lacks details of how the participants will work together to identify collaborative research questions, share protocols, or develop and disseminate materials. Success of the project will depend on the active contributions of participants, and it is unclear how many stations will be contributing to the project. At this point, only two stations with a single participant from each station are listed in Appendix E. It is important that project participants be identified and be committed to contributing to the project. It is recognized that nationally there has been faculty turnover in this expertise area, therefore, newer faculty should be invited to join the project.

Carthy Ernst moved to recommend acceptance only after revisions, Mike Schutz seconded. Motion passed unanimously.

NC2040

The midterm review of ***Metabolic Relationships in Supply of Nutrients for Lactating Cows*** was reviewed by Guillermo Scaglia (primary) and Bryan Wiegand (secondary).

Objectives:

1. To develop novel behavioral and physiological indicators of animal welfare or apply existing measures to generate novel knowledge or applications.
2. To strengthen the scientific basis of applied research, on-farm and industry assessments and standards, and stakeholder engagement related to animal welfare.
3. To investigate animal behavior across relevant species, contexts, and life stages as a means to generate new knowledge related to species-specific animal welfare needs.

The midterm report was reviewed under Appendix I review criteria as a Mid-term review. The project has a long tradition of success through previous versions and includes many key researchers in ruminant nutrition. It is noted that this committee has worked for 40 years and that the 2021 publication of the Eighth Revised Revision of the NASEM Nutrient Requirements of Dairy Cattle, a work that took 6 years, was developed by a committee with more than half of members who are current or retired NC-2040 members. The project is in its third year with two reports available (2024 and 2025). There appear to be 14 participants with 11 on-line in 2024 and 22 in-person and 7 online in 2025 (38 participants registered including graduate students). It was noted that reporting differed between years. For instance, in 2024 they reported on 3 primary themes and in 2025 they reported on objectives with several objectives listing no information to report. Some universities were cited that are not included in list of participants. There is mention of multidisciplinary collaborations. There are several ties to Extension that could be capitalized on.

Guillermo Scaglia moved to approve with comments, seconded by Bryan Wiegand. Motion passed by unanimous vote.

NCCC308

The midterm review of ***Nutrition and Management of Feedlot Cattle to Optimize Performance, Carcass Value and Environmental Compatibility*** was reviewed by John Jaeger (primary) and Guillermo Scaglia (secondary).

Objectives:

1. Enhance the utilization of C capture from energy feeds and waste products from bio-processing industries to compete in an energy economy and improve national food security.
2. To enhance the environmental sustainability of the feedlot industry through conservation and nutrient management.
3. To enhance the production efficiency and quality of feedlot (beef and dairy-type) cattle through management strategies and technologies.
4. To enhance management strategies that improve animal health and well-being.

The midterm report was reviewed under Appendix K review criteria as a Mid-term review. This multistate project continues to deliver impactful, innovative research that enhances the efficiency, environmental sustainability, and animal well-being of the U.S. feedlot industry. The project objectives have been fully met or exceeded through coordinated research efforts across 23 participating states. The outcomes have resulted in numerous peer-reviewed publications, validated feed efficiency strategies, reduced nutrient waste, improved animal health, and strengthened alignment with public expectations for sustainability and food security. In general, participants published independently within their respective research groups or institutions. There was one abstract resulting from project member collaboration across institutions and/or agencies. Collaborative outreach activities not listed in the report include: Siouxland Feedlot Forum; DC 48 Discover Conference; and Lancaster Cattle Feeders Day. Deliberate research collaboration is encouraged. The group is to be commended for actively involving graduate students in both presentations and discussions. Reported peer-reviewed publications were 105 for 2024 and 75 for 2025. There were also numerous abstracts, reports, posters, podcasts, and oral presentations. It is recommended that the group increase their focus on collaborative multi-state research efforts.

John Jaeger moved to approve with comment on collaborative effort, seconded by Guillermo Scaglia. Motion passed by unanimous vote.

NC1170

The midterm review of ***Advanced Technologies for the Genetic Improvement of Poultry*** was reviewed by Deb Van Overbeke (primary) and Pasha Lyvers (secondary).

Objectives:

1. Create and share data and technology to enhance the development and application of genomics and systems biology in poultry.
2. Facilitate the creation and sharing of poultry research populations and the collection and analysis of relevant new phenotypes including those produced by gene transfer.

3. Elucidate genetic mechanisms that underlie economically important traits, including genetic variants and functional regulatory elements within the genomes of poultry species, and develop new methods to apply that knowledge to poultry breeding practices.

The midterm report was reviewed under Appendix I review criteria as a Mid-term review. This is a long-standing project that dates back to 2004. It has evolved over time to include -omics work. The project includes over 20 organizations including academic, industry and international partners. They have had active, strong participation in their annual meetings with over 40 attending in 2024 and over 60 attending in 2025. Objective 1 has had 5 unique activities with several institutions. It is not clear how much cross-collaboration there is in activities under the objective, but there are multiple institutions involved. Objective 2 relates to maintaining genetic lines – 3 group members maintain the majority of these lines and 6 others are involved in some genetic lines. It appears that these are shared with others in the group as they are needed for projects and activities. Objective 3 has 5 areas of work including disease susceptibility and infection, susceptibility to stress and environment, growth & development, gut health/microbiome and poultry production. Several institutions are involved in each area of activity. Progress is being made toward publishing. The committee had 11 publications in 2024 and 37 publications in 2025. They have intent to strengthen collaboration and continue to discuss sharing of genetic lines.

Deb Van Overbeke moved to approve, seconded by Pasha Lyvers. Motion passed by unanimous vote.

NC2042

The midterm review of ***Management Systems to Improve the Economic and Environmental Sustainability of Dairy Enterprises*** was reviewed by Dan Shike (primary) and John Jaeger (secondary).

Objectives:

1. Improve calf and heifer growth, health, and welfare through enhanced nutrition, housing, and management.
2. Improve dairy cow performance and welfare through enhanced forage production and utilization, nutrition, housing, and management.
3. Integrate data and technology to enhance environmental, economic, and social sustainability of the dairy enterprise.

The midterm report was reviewed under Appendix I review criteria as a Mid-term review. This is a very productive group. The group may not have captured all publications, but an extensive publication list has been provided. The committee did a good job in both annual reports and called out specific collaborations. There are a wide range of activities within objectives. It was noted there could be greater reporting of the impact the committee is making, such as through industry adoption of practices resulting from their work. Meeting attendance was lower than expected in 2025 (Brookings, SD). The committee is encouraged to seek ways to encourage meeting attendance.

Dan Shike moved to approve, seconded by Deb Van Overbeke. Motion passed by unanimous vote.

Other Business: Officers agreed to continue into the last year of three-year terms. Pasha Lyvers agreed to continue on a three-year term as chair, Mike Schutz agreed to continue service as secretary. Officer elections will again be required at the 2027 annual meeting of NCAC6. Pasha indicated she would poll the group to see if the preference was to meet again during the third week of January in 2027. A request was made to not meet on Wednesday due to an annual conflict.

There being no further business, Pasha Lyvers adjourned the meeting at about 10:45 am.

Respectfully submitted.

Mike Schutz, UMN
Secretary, NCAC6