

## Minutes

### National Animal Nutrition Program - NRSP-9

#### Conference Call - Coordinating Committee

October 20, 2016

Members present: Merlin Lindemann (Chair), Gary Cromwell (Past Chair), Todd Applegate, Don Beitz, Joel Caton, Ryan Dilger, Jack Odle, Carey Williams

Members absent: Mike Galyean, Delbert Gatlin, Nancy Irlbeck, Heidi Rossow

USDA NIFA: Charlotte Kirk Baer

Administrative Advisors Present: Lesley Oliver

#### 1. Call to order

The meeting of the Coordinating Committee was called to order at 2:00 PM Eastern by Lindemann. Roll call was taken, and a quorum was present. The committee received the agenda as information.

#### 2. Opening comments from Administrative Advisors

Comments focused on upcoming changes in the Fair Labor Standards Act. Post-doctoral scholars with the NANP program have their benefits covered by an alternate means at the University of Kentucky. Hourly options, rather than salaries, for post-doctoral scholars were considered, but salary was determined to be better aligned with new Fair Labor Standards Act requirement, with the state to continue providing benefits. The postdoctoral salaries at UK will have a minimum of \$47,500. Lindemann will develop a position description for advertisement.

#### 3. Update from the USDA – C. Kirk Baer

USDA NIFA is highlighting the current administration's accomplishments; the NANP is highlighted in the Under Secretary's report featuring significant impacts resulting from USDA investments. USDA NIFA is planning to focus more effort on various aspects of agricultural data, which includes, but is not limited to, economic, genetic and genomic, feed, and other data to increase data-driven advances in agriculture. To solicit stakeholder input to help identify the most critical priorities in data for agriculture, a major summit was held in Chicago on October 10, 2016. The USDA NIFA welcomes feedback from scientific audiences, including NANP, to help NIFA prioritize its upcoming data-related activities. Kirk Baer shared the applicable link for input

through NIFA's Ideas Engine. Kirk Baer also anticipates entertaining proposals for workshops related to data collection or any aspects related to data through various NIFA competitive grants programs in the coming years. To this end, NANP might consider responding to relevant requests for applications in the future.

#### **4. Update from NRC/NASEM – R. Schoen**

No updates were shared at this time.

#### **5. Minutes of the September 15, 2016 conference call**

The chair welcomed comments related to the minutes. A motion was approved to accept the minutes as distributed (Beitz moved, Cromwell seconded).

#### **6. Previous, ongoing, or old business items**

Action item review and update (provided for review at the end of the September 2016 minutes):

- a. Lindemann reported that letters have been revised and will shortly be enroute to Beitz.
- b. Lindemann updated the committee that the meeting with Elsevier including Cromwell, Kirk Baer, Odle, and Lindemann will be held in Lexington, Kentucky this afternoon.
- c. Lindemann conveyed that Gatlin has continued to interact with aquatic colleagues at the University of Alabama. Gatlin will continue to dialog with colleagues to understand exactly what research/information is desired relative to zebrafish nutrition/diets. Beitz informed the committee that he had a feed company call from Kansas related to the need for standardized laboratory and aquatic diets; Beitz advised the caller to reach out to Gatlin directly. Odle reminded the committee that standardized diets for research using zebrafish are particularly needed.
- d. Lindemann shared an update related to the interactions with Chalk Labs. Dilger conveyed that the subcommittee had prepared a statement of work (SOW), and it was reviewed by Rossow and Irlbeck. The SOW can be presented to various firms to identify a website group to take on the website maintenance such that the committee can make minor updates on its own. Dilger will send the SOW to the entire committee. Approximately 10 firms located within Illinois were identified as possible vendors. Dilger intends to have a meeting with Chalk Labs to ensure clarity related to what specific work the committee seeks from Chalk Labs and what can be done by NANP personnel.

#### **7. New business items or updates**

- a. Web site updates and issues

Website subcommittee report - Lindemann welcomed further comments related to this issue.

b. Update from Feed Composition committee

1. Dilger conveyed that on August 18, at the in-person committee meeting in Omaha, the committee discussed a single database for all species. A single database is sought so that all species feed ingredient information would be housed therein. The committee also contemplated how the drive of new data from companies could incentivize companies to submit data annually. The committee also discussed how it could sustain itself as a self-funded entity after federal funds end so that data can be captured and curated in the long term. Dilger shared that upon selecting an ingredient in the common database would feature the common constituents with separate tables per species; this differs from the current situation wherein there are separate databases for separate species. Odle suggested there might be value in providing an opportunity so that a feedstuff could be queried by species; Dilger conveyed that a viewer could filter by interest (species, dry matter basis, etc.).

Lindemann inquired about the value of the in-person meeting versus conference calls; Dilger conveyed that the committee was unanimous that holding a face-to-face meeting was highly efficient and a great deal of progress was made. Cromwell inquired with Dilger whether the NRC standards for each species were different and Dilger confirmed they are, and that one single database would be valuable because it would harmonize the statistical approaches used across standards publications. Swine, beef, and dairy would be brought under the same database.

2. Lindemann inquired with the committee regarding posting a post-doctoral scholar position for the feed composition committee. Dilger suggested that the committee is ready to identify a post-doc immediately. The motion was approved authorizing a post-doctoral scholar for the feed composition committee as soon as possible, at the directed federal salary rate of \$47,500 (Beitz moved, Odle seconded). Dilger advised that Phil is the best person to lead on a new post-doctoral scholar regarding posting and considering candidates. Lindemann will discuss next steps regarding posting of the position with the committee chair. Cromwell suggested that when the previous post-doctoral scholars were identified, the job announcements were submitted to ASAS, ADSA, PSA, and department chairs.

c. Update from the Modeling committee

1. Lindemann reported that the committee is meeting in person this coming Sunday (October 23) in St. Louis, which Lindemann will also be able to attend.

Lindemann will discuss next steps regarding posting of the position with the committee chair this weekend.

- d. Next monthly conference call – November 17
  - 1. Lindemann suggested the timing of the conference call might be re-evaluated by the committee between academic semesters. The committee might wish to modify the time of the call each month.
- e. Other items
  - 1. No other items were brought forth by the committee.

#### **8. Closing comments from Administrative Advisors**

No additional comments were conveyed.

#### **9. Adjournment**

Lindemann adjourned the meeting at 2:37 PM Eastern time.

## Minutes

National Animal Nutrition Program - NRSP-9

Conference Call - Coordinating Committee

November 17, 2016

Members present: Merlin Lindemann (Chair), Gary Cromwell (Past Chair), Don Beitz, Joel Caton, Ryan Dilger, Jack Odle, Heidi Rossow

Members absent: Todd Applegate, Mike Galyean, Delbert Gatlin, Nancy Irlbeck, Carey Williams

USDA NIFA: Charlotte Kirk Baer

NASEM: Robin Schoen

### 1. Call to order

The meeting of the Coordinating Committee was called to order at 2:03 PM Eastern by Lindemann. Roll call was taken, and a quorum was present. There were no changes or additions to the agenda.

### 2. Opening comments from Administrative Advisors

There were no comments from Administrative Advisors. However, Lindemann reported updates related to hiring of post-doctoral fellows. When the post-doctoral positions were advertised previously, the announcements were sent to department heads, JAS, JDS, PS, NANP subcommittees, and other vehicles. Lindemann will work with human resources to ensure the positions are widely distributed.

### 3. Update from the USDA - C. Kirk Baer

Kirk Baer reported USDA is focusing on transition to a new administration, and is operating under a Continuing Resolution through December 9. NIFA is hopeful there is no delay in action related to the budget for NIFA. Priorities with the new administration will not be known until a new Secretary of Agriculture is in place. NIFA requested \$1.32 billion which would be a \$50 million increase over FY16. NIFA also requested that a third-party auditor evaluate the formula funds used to fund universities to help illustrate the value of NIFA's priorities.

### 4. Update from NRC/NASEM - R. Schoen

Schoen reported that funds for a poultry publication continue to be secured, with \$20,000 recently coming from the Pennsylvania poultry check-off program. Schoen also met with Richard Sellers with the AFIA, who advised that AFIA might be able to leverage buy-in with egg and turkey stakeholders and attempt to gain funding from them that matches the AFIA funds. Schoen reported that once funds are in place, the committee can be created and put into

motion. Schoen advised that commitment letters (with funds to come at a later date) are certainly welcome from sponsors. Schoen conveyed that the Poultry Science Foundation would serve as a conduit to gain funding industry-wide and collectively. Schoen would welcome contacts and would appreciate committee members to open doors with potential donors.

With regard to the NRC computer models, Schoen stated that in discussion with the NASEM counsel about access to the model for the NANP modeling committee for modification, they need to refine the language around the disclaimer and restrictions for the modification-oriented models to reflect NASEM's copyright, rights, and needs for giving credit to the NASEM. Schoen stated that in starting with one - the swine model - NASEM could utilize it as a test case for other species to follow. Schoen further stated that difficulty exists with NANP in that the NANP is not a legal entity; NASEM may continue to move forward in a gentleman's agreement between NASEM, NIFA, and NANP. The template can be incorporated as a tool that is available to the public, yet NASEM will continue to have copyright needs and a requirement for public use as a package; this aspect of the process will be examined further. Rossow reported that the multi-species interface could be used with the models for all species, so long as the required NASEM language is incorporated. Schoen explained that if the original model is being viewed, the NASEM academy's rights and copyright protection all apply, whereas if the platform is used by the public to view the models and then the models modified, Schoen envisions language that clarifies that it cannot be utilized for commercial purposes. Schoen contends specific language would be helpful. Lindemann suggested a conference call be held that includes modeling and coordinating committee members to discuss the disclaimer needs further and to clarify next steps.

#### 5. Minutes of the October 20, 2016 conference call

The committee approved a motion to accept the minutes following a minor wording move and removal of a highlight (Beitz moved, Caton seconded).

#### 6. Previous, ongoing, or old business items

Action item review and update (provided for review at the end of the October 2016 minutes):

- a. Lindemann reported that mailings of brochures have been moving forward; the mailings are currently enroute via FedEx to Beitz for distribution to attendees, agricultural leaders, and others. There are 120 copies of the letter for distribution to agricultural leaders.
- b. Lindemann provided an update regarding the meeting with Elsevier, including that a meeting was held that included approximately 6 people, communications were beneficial, contracts were highlighted during the meeting, and that Elsevier was expected to respond to the committee again soon. Lindemann reported Elsevier had significant turnover of staff. Odle conveyed a disconnect between the words on the contract and spirit of what was expected of Elsevier on a day-to-day basis. Specifically, Lindemann echoed that the search terms were discussed, and the monthly updates were also discussed and emphasized with Elsevier. Odle also shared that the searches for "animal nutrition" and "human nutrition" will likely yield few results unless the exact words were incorporated

into the articles that were published in those spheres, and that the themes themselves are intended to be the start of the search.

- c. Lindemann reported that Gatlin and the University of Alabama were discussing further the needs of the zebrafish community for standardized diets.
  - d. Lindemann also reported that the subcommittee dealing with website needs had met, and that Lindemann would look to Dilger for additional context. A meeting with ChalkLabs will be attempted.
7. News business items or updates
- a. Web site updates and issues - Website subcommittee report  
Dilger conveyed that since the October call, the subcommittee seeks desired changes to the website from the committee. Once the set of static changes is amalgamated, those will be shared with ChalkLabs. Dilger seeks a meeting with ChalkLabs during the first quarter of 2017. Dilger has already vetted design firms so that they can be used in short order. Lindemann reported that the subcommittee discussed Tran's previous changes also. The committee will plan to pay ChalkLabs on an hourly basis.
  - b. Update from Feed Composition committee  
Dilger shared an update from the composition committee. The subcommittee is drafting a memorandum of agreement for the coordinating committee to consider relative to the solicitation of data from sponsors for modeling needs. The document will soon be made available for the coordinating committee to review. Odle shared that the American Society for Nutrition is launching a new journal that is open-sourced; the journal seeks to highlight food and feed composition which provides a unique outlet for those data to be found.
  - c. Update from the Modeling committee  
Lindemann welcomed additional comments regarding the post-doctoral fellow position. Lindemann advised that there is no formal evaluation for post-doctoral fellows; in the description, the position is established for one year with continuation up to 5 years, dependent on the success of the position and funding for it. Lindemann described that this would provide for international post-doctoral candidates to apply because 5 years is the upper limit for their terms. Lindemann inquired whether the position would be acceptable for a visiting scholar and sought the committee's feedback. The position will be advertised as a post-doctoral scholar but could be utilized as a visiting scholar. The committee did not achieve consensus that the position could be filled by either a post-doctoral candidate or a visiting scholar, due to the very short timeframe within which the visiting scholar would be available for the work. The committee gained consensus that the position description need not be changed, and that the timeframe for the work would be assessed based on the individual, being flexible enough to accommodate whatever scientist fits the role best, while recognizing that the likelihood of finding an optimal visiting scholar is likely low.

d. Next monthly conference call - December 15

The next conference call will be held December 15 from 2-3 PM Eastern time.

e. Other items

Lindemann will email the committee to inquire about scheduling in the spring, followed by a Doodle poll to establish the time of the conference calls.

Rossow provided an update related to the in-person meeting held in Saint Louis in October. The modeling and feed composition committees have expressed a desire to be included in a spring on-site meeting of the coordinating committee. Additional items discussed were how to support the future nutrient requirement revisions, and brainstorming on other activities such as development of an infrastructure regarding publications of common methods used in nutrition research such as cannulation and other methods related to sample collection as well as methods related to laboratory handling and analysis of samples.

8. Closing comments from Administrative Advisors

No additional comments were conveyed.

9. Adjournment

Lindemann adjourned the meeting at 3:02 PM Eastern time.

**Agenda**  
**National Animal Nutrition Program**  
**Coordinating Committee**  
**January 19, 2017 2:00 PM EDT**

**Call in: 888-844-9904**

**Code: 4629822**

Members present: Merlin Lindemann (Chair), Gary Cromwell (Past Chair), Todd Applegate, Don Beitz, Joel Caton, Ryan Dilger, Delbert Gatlin, Nancy Irlbeck, Jack Odle, Heidi Rossow

Members absent: Carey Williams

USDA NIFA: Charlotte Kirk Baer

NASEM: Robin Schoen

1. Call to order

The meeting of the Coordinating Committee was called to order at 2:00 PM Eastern by Lindemann. Roll call was taken, and a quorum was present. There were no changes or additions to the agenda.

2. Opening comments from Administrative Advisors

There were no comments from Administrative Advisors.

3. Update from the USDA – C. Kirk Baer

Kirk Baer relayed President-Elect Trump has issued his recommendation for Dr. Sonny Perdue to serve as USDA Secretary, and the USDA continues its transition to the new administration.

4. Update from NRC/NASEM

Schoen will be meeting with general counsel for NASEM within the next month to solidify language to allow access to the NRC swine model. NASEM continues to solicit funding for the NRC revision from poultry associations with AFIA assistance. NASEM also seeks to hold a webinar for state corn growing associations and marketing associations to discuss possible contributions to the study. Additionally, NASEM was contacted by the European canine and feline nutrition association to discuss differences between the AAFCO interpretations of NRC versus the interpretations within Europe, and to close the interpretation gap; Schoen seeks to identify ways to study the scientific differences between the two, particularly a footnote that refers to the energy density of a certain diet for dogs with normal activity versus dogs with a lower energy requirement such as obese animals. European countries and companies

have made an adjustment for those variables, and reconciliation between Europe and USA is sought. Odle suggested the Morris Animal Foundation might be a resource for funding support if it is needed.

5. Minutes of the November 17, 2016 conference call

Lindemann welcomed comments and questions. The committee approved a motion to accept the minutes as distributed (Gatlin moved, Cromwell seconded).

6. Previous, ongoing, or old business items

a. General

Lindemann relayed there are no zebrafish nutrition updates at this time. Dialog between Gatlin and external audiences will continue. Gatlin conveyed his conversations have continued and will keep the committee updated as more information is gained.

b. Update

Lindemann shared he, Odle, and Kirk Baer continue to discuss the GANN database material with Elsevier. Another conference call was held recently with Elsevier (New York and Netherlands). Elsevier shared a tentative template with the group, and ultimately, the committee will provide Elsevier with a list of search terms. Lindemann invited the committee to review the Word and Excel files. The concept of additional charges was raised by Elsevier; however the committee group came back to Elsevier with concerns about the inadequacy of the current search. Odle relayed the taxonomy that the inaugural coordinating committee amalgamated in order to map out the key words and various search concepts. Odle also relayed an attachment regarding a nutrition journal list of key words that he had pulled together previously. Kirk Baer also echoed the usefulness of the list from Odle and relayed that Elsevier is likely to identify relevant thesauri such as the National Agriculture Library among others, as well as fingerprints of information and authors. Many terms in Odle's list will be in the thesauri, that Elsevier will then use to search the Scopus database for terms that relate to the thesauri using a set of algorithms. Lindemann will reach out to Elsevier with a list of terms and asks the committee to review the files by January 26 for comprehensiveness and relevance as well as recommendations for ways forward.

7. New business items or updates

a. Web site updates and issues - Website subcommittee

Lindemann relayed that the committee continues to target a meeting with Chalk Labs within the upcoming weeks. Dilger echoed the need for an upcoming meeting. Kirk Baer also shared that lengthy time period has passed since formal engagement with Chalk Labs, and would encourage the committee to tackle a way forward soon either through an in-person meeting or a webinar. White-Shim will incorporate the committee meeting dates into the calendar so that the wider animal nutrition community can stay apprised of progress.

b. Update from Feed Composition committee

There are no updates at this time.

c. Update from the Modeling committee

There will be a conference call this afternoon. Lindemann also shared that the post-doctoral positions were posted on FASS and ASAS websites, with three candidates indicating interest thus far. The positions will remain open until suitable candidates can be identified

d. Request for a modeling workshop

Lindemann provided the CC with a request from the Modeling Committee for a workshop at the ADSA summer meetings. Cromwell indicated a \$185,000 fund at this time, and that if the committee encumbers post-doctoral salaries for half-year each, as well as an NRC payment for the year, the balance will be approximately \$120,000. Cromwell conveyed that the modeling workshop concept has been underway for some time, and that the target audience at this particular time is graduate student attendees of the annual ADSA meeting. Funds will go toward food and the meeting, as well as from attendee ticket sales. Rossow indicated that a modeling workshop at the JAM was attempted and ultimately became a seminar; however the workshop concept would provide a more hands-on approach. Rossow also relayed that the workshop would be done at various animal sciences meetings, and it could be a possibility to record it as a webinar. The committee voted to approve the request for holding a workshop with travel expenses subject to UK travel guidelines.

e. Next monthly conference call

The next conference call will be held February 16. Lindemann relayed Nathalie Trottier may be present on the call to discuss research and laboratory assay methodologies.

f. Other items

Lindemann welcomed other items from the committee. Cromwell shared the concept of having a booth at the 2017 annual ASAS meeting. Lindemann will incorporate the concept into the February meeting as an agenda item.

8. Closing comments from Administrative Advisors

No comments were shared at this time.

9. Adjourn

A motion was approved to adjourn (Odle moved, Gatlin seconded). The meeting was adjourned at 3 PM Eastern time.

**Minutes of the Coordinating Committee**  
**National Animal Nutrition Program – NRSP-9**  
**Conference Call – February 16, 2017 2:00 PM EST**

Members present: Merlin Lindemann (Chair), Gary Cromwell (Past Chair), Nancy Irlbeck, Heidi Rossow, Carey Williams

Members absent: Todd Applegate, Don Beitz, Joel Caton, Ryan Dilger, Delbert Gatlin, Jack Odle

USDA NIFA: Kirk Baer

1. Call to order; additions or changes to the agenda

The meeting of the Coordinating Committee was called to order at 2:04 PM Eastern by Lindemann. Roll call was taken, and a quorum was not present. Lindemann indicated the committee would be able to hold an informational meeting. There were no changes or additions to the agenda.

2. Update from the USDA – C. Kirk Baer

Kirk Baer reported the Secretary of Agriculture will be confirmed in March 2017. Kirk Baer also relayed that it would be helpful for committee members to submit reports on their regular projects to the REEPort system for Kirk Baer to utilize. Some reports in the system have been copied and pasted from the previous year, and she encouraged committee members to submit new information, particularly within the “Outcomes” section. Kirk Baer indicated the incoming Secretary will likely have a new focus given the Secretary’s background in agriculture and veterinary medicine. Lindemann suggested that the incoming Secretary’s new priorities may be a potential topic for another summit.

3. Update from NRC/NASEM – R. Schoen

Lindemann conveyed that Schoen, which shared that Schoen would be meeting soon with their general counsel to discuss language for access to the swine model, with next steps being to have an update for the committee next month. Lindemann conveyed that language for the model from the NASEM general counsel will be helpful for the swine model as well as other models. Kirk Baer expressed interest in whether the language will be for posting the model online, for agreements, or for other needs. Rossow indicated that code development for the dairy model is underway, through use of a number of individuals working on different components, with a plan to combine the components together. Rossow shared that the beef model was done in Excel, but the dairy model software being used is unknown at this time. Cromwell also conveyed that having code for the swine model may have limited utility at this time, due to the need for a common platform across species.

#### 4. Minutes of the January 19, 2016 conference call

No vote was taken relative to the minutes due to lack of quorum, yet Lindemann welcomed additional comments related to the minutes. Minutes have been harmonized with minutes from previous years.

#### 5. Previous, ongoing, or old business items

##### a. General

Lindemann relayed that although no specific progress has been made with regard to zebrafish diets, recent research has indicated that zebrafish diets have been found to affect performance of subsequent generations of zebrafish. Lindemann encouraged the committee to continue discussions with the zebrafish community.

##### b. Update on Elsevier database

Lindemann shared that several committee members submitted comments. Lindemann collated them, and will soon be sending them to Elsevier.

#### 6. New business items or updates

##### a. Web site updates and issues -Website subcommittee report

Lindemann shared that ChalkLabs, Lindemann, and Dilger had a conference call this week, at which time it was discussed and agreed that Dilger would be given access to the website to make cosmetic changes as fitting with the committee needs. Dilger has been reviewing the website and identifying opportunities for enhancement to be made by the committee. Dilger is also familiar with box.com, which is the cloud storage that is regularly used at the University of Illinois, and is used by this committee for NANP website storage. For any new, substantive items for the website, ChalkLabs will be involved in adding them through execution of a specific Statement of Work. Non-substantial items that are done by ChalkLabs will be billed directly by ChalkLabs. Lindemann conveyed positive ways forward coming out of the conference call. Lindemann shared that ChalkLabs continues to maintain the website for a small fee. Rossow conveyed that the website committee had reviewed various website companies previously, and Lindemann confirmed that the plan will be to continue to use ChalkLabs services for the near term. Kirk Baer commented on the importance of having a person dedicated to incorporating updates into the website, and perhaps hiring someone to undertake this over the long-term. Rossow conveyed the importance to incorporate titles of papers into the website, and Lindemann shared that Dilger will be the technical point of contact to add these types of items to the website. Lindemann encouraged the committee to consider identifying a member to serve as a substitute website editor and to cross-train committee members and/or post-doctoral candidates for website editing.

Lindemann shared that six post-doctoral candidates have applied for the positions, and there are no domestic applicants at this time. The opportunity for a post-doctoral

candidate to undertake this activity might or might not be achievable depending upon identification of a suitable candidate for the position.

b. Update from Modeling committee

Rosow discussed the committee's activities related to the modeling workshop at the ADSA summer meeting and the preparation of abstracts. She also shared that the post-doctoral candidates were narrowed, with an eye toward undertaking conference call interviews with the candidates. Lindemann shared that the modeling committee reviewed four applications, and there are two individuals who are considered suitable candidates for the position.

c. Update on post-doctoral applicants

Lindemann conveyed that one of the candidates who applied for a post-doctoral position with the Modeling committee might be suitable for the Feed Composition committee. Lindemann further conveyed the deadline for renewal of advertising is February 17, 2017 and he encouraged the committee to re-post the position, costing approximately \$300. Cromwell advised that previously, there were 10-15 applications for the Feed Composition committee position, with a separate set of applications for the Modeling committee. Kirk Baer conveyed that previous announcements were submitted widely, and Lindemann shared that the announcement was submitted to the department heads this year, as well. Cromwell identified that the Taking Stock feature within the ASAS publications would be of value, which Lindemann indicated he would follow up to do.

d. Booth at ASAS meeting in Baltimore - July 9-12

Lindemann shared that Cromwell will oversee the booth at the meeting and welcomed other committee members to participate as volunteers. Cromwell will identify members to help. White-Shim conveyed interest in participating and will further check on the possibility.

e. Next monthly conference call – March 16

Lindemann indicated plans to have the monthly conference call at the regularly scheduled time.

f. Other items

Irlbeck indicated she would convey her new Washington State University contact information to the committee for updating her information.

7. Adjourn at 3:00 PM EST

Lindemann adjourned the meeting at 3 PM EST.

8. Post-call update from Nathalie Trottier, Modeling Committee, on the committee's thoughts about workshops or conferences on how we can retain knowledge of various procedures (surgical, sample handling, lab techniques) as the nutritional community ages and retires.

## Minutes

### National Animal Nutrition Program

#### Coordinating Committee

March 16, 2017 2:00 PM EDT

Members present: Merlin Lindemann (Chair), Gary Cromwell (Past Chair), Don Beitz, Joel Caton, Ryan Dilger, Jack Odle, Heidi Rossow, Carey Williams

Members absent: Todd Applegate, Delbert Gatlin, Nancy Irlbeck

Administrative Advisors present: Bret Hess

USDA NIFA present: Charlotte Kirk Baer

#### 1. Call to order; additions or changes to the agenda

Lindemann convened the conference call at 2:03 PM EDT and conducted the roll call. A quorum was present.

#### 2. Opening comments from Administrative Advisors

Hess underscored the value of NIMSS and the importance of submitting reports, and specifically submitting documentation of the committee's impact. Hess will find previous midterm reports that were presented by similar committees as examples for our report. The program review committee wishes to see benefits of the committee's work to society. Preparation of a report would be a good agenda item for the meeting in May. Hess also conveyed that the overall committee progress must be reported each year through NIMSS. Kirk Baer noted that individual committee members must submit individual accomplishment reports as well.

#### 3. Update from the USDA – C. Kirk Baer

Kirk Baer reported that President Trump has released his budget blueprint which identifies his proposal for funding. Similar to other agencies including EPA and NOAA, USDA is slated to have a funding decrease from the previous funding level. While that decrease appears to be 21% total, there are no projected decreases in the competitive funding for food and agriculture research items. Kirk Baer will send the report to the chair for the committee's information.

#### 4. Update from NRC/NASEM – R. Schoen

Schoen reported, per Lindemann, that there has been progress on raising of funds for the NRC poultry requirement revision based on meetings with grain associations. There is also progress being made related to the accessibility to coding language in the swine model per a meeting Schoen has had with general counsel.

5. Minutes of the January 19, 2016 conference call

A motion was approved (Beitz moved, Cromwell seconded) to accept the minutes as distributed.

6. Minutes of the February 16, 2017 conference call

A motion was approved to correct (take the phrase 'which shared that' out of item 3) the minutes from the February meeting and accept the corrected minutes. Beitz moved, and Cromwell seconded the motion.

7. Previous, ongoing, or old business items

Lindemann asked the committee to review the information that was presented after the February 16 CC conference call related to the thoughts of the Modeling Committee regarding a workshop, which includes the need for funding in the future. Lindemann also noted that the Feed Composition or Modeling Committee might seek and procure USDA funding for a workshop to be held. Lindemann conveyed the need to discuss the February 16 Modeling Committee ideas in more detail at the May in-person meeting.

8. New business items or updates

a. Web site updates and issues

Lindemann shared that ChalkLabs, Lindemann, and Dilger had a conference call in February. A lengthy conversation yielded that Dilger would serve as a technical point of contact for the committee's website. Dilger reported that he attempted to make small changes to the website yet it was difficult to do so; the coding of the website by the team was such that even small changes were difficult for Dilger. Dilger investigated whether there were other vendors that could manage the website in its entirety. Dilger identified three firms that would be able to handle the project and give the committee a complete product within 2-6 months. Dilger conveyed he has worked with the subcommittee to pull together an initial draft statement of work (SOW) that reflects committee and subcommittee needs. All three firms conveyed their willingness to tackle the project and cost based on the draft SOW. Two of the three firms suggested an immediate need for the website revision, a second aspect to manage the content for the website, with a third aspect being to tackle database issues. The first task could be \$13,000-\$30,000 with the database being at least another \$20,000. Dilger conveyed the committee would have an ability to make basic changes to the website, such that a yearly fee to the company should be minimal. Dilger conveyed that ChalkLabs' strength is visualization and big data, and that a forward-facing website to end-users is not their strength, such that use of a different vendor would likely be better for the committee's needs. Lindemann shared there is no contract with ChalkLabs in place at this time. Cromwell conveyed there is \$20,000 per year available for website maintenance and data management. Odle reminded the committee that there was a contract providing for a platform to be used for the GANN database, which may be useful in the interim until new data are later provided by Elsevier. Lindemann presumed the future costs for the database would be the hourly cost to ChalkLabs when new data are sent by Elsevier. Cromwell also

conveyed there was a part of the contract that identified the first committee's term as being the timeframe within which the maintenance would occur and reminded the committee that it is now within its second term. Three contracts were originally made with ChalkLabs. The first contract was approximately \$37,000, the second contract was \$52,000, and the third contract was \$67,000 for networking, among other activities by Chalk Labs. Lindemann identified the April or May meeting as being the last timeframe by which a decision needs to be made regarding the website. Kirk Baer relayed a decision must be made as soon as possible. Lindemann welcomed a motion. The committee approved a motion (Beitz made the motion, Cromwell seconded) to authorize Dilger to proceed with bids for development of proposals for the website according to University of Kentucky rules. Dilger conveyed his intent to meet face to face with each company. Rossow reminded the committee of the value of being able to make small changes to the website by the committee members, and Dilger conveyed a number of individuals (e.g., post-docs, subcommittees, committee members) would have the ability to make small changes to the website and provide for needed independence.

b. Update from Feed Composition committee

There were no updates at this time.

c. Update from the Modeling committee

There were no updates at this time.

d. Onsite Coordinating Committee meeting - May 15-16, Lexington, KY

Lindemann conveyed the meeting will be held from the morning of May 15 through noon of May 16. Cromwell conveyed expenses and other coordination needs are likely already familiar to the committee. Lindemann shared the logistics related to the May meeting will be tackled within the next few weeks, including meeting location and hotel.

e. Booth at ASAS meeting in Baltimore (July 9-12)

Lindemann shared Cromwell is overseeing the booth activities. Lindemann welcomed additional committee participation to help Cromwell.

f. Next monthly conference call – April 20.

Lindemann indicated plans to have the monthly conference call at the regularly scheduled time.

9. Closing comments from Administrative Advisors

No additional comments were made.

10. Adjourn

Lindemann adjourned the meeting at 3:04 PM EST.

## Minutes

### National Animal Nutrition Program

#### Coordinating Committee

April 20, 2017 2:00 PM EDT

Members present: Merlin Lindemann (Chair), Gary Cromwell, Todd Applegate, Don Beitz, Joel Caton, Ryan Dilger, Delbert Gatlin, Nancy Irlbeck, Heidi Rossow

Members absent: Jack Odle, Carey Williams

USDA NIFA present: Kirk Baer

1. Call to order; additions or changes to the agenda  
Lindemann convened the conference call at 2:04 PM EDT and conducted the roll call. A quorum was present.
2. Website subcommittee report and discussion of hosting options  
Dilger reported on outcomes of meetings with several web design companies in the Champaign-Urbana, Illinois area. The subcommittee has received three proposals from the companies, and the proposals have been shared with the subcommittee and others (Miller, Hanigan, and Lindemann). Each company assessed its ability to efficiently and quickly redesign the website and restructure the database. Dilger hopes to hold a conference call with the website subcommittee the week of April 25 to compare each company's proposals. The costs varied from \$15,000 to \$40,000 for the website redesign. The cost for the database restructure would be approximately \$30,000-\$35,000 resulting in full costs ranging from \$30,000 to \$71,000. The project timeline would be approximately 30-34 weeks, the first 15 weeks of which would comprise the timeframe for updating the website design. Ranges for yearly continuing costs would be approximately \$2500-\$7500. Dilger indicated his goal would be to have a solid decision-making conversation at the May in-person meeting. Lindemann conveyed the need to identify the specific timeframes and dollar amounts from the preferred company ultimately identified. Assuming that the Coordinating Committee makes a decision to proceed, the information would then be provided to the University of Kentucky purchasing office for approval of the sole-source contract. Dilger conveyed that with a decision in May, a newly redesigned website would probably be ready in August.
3. Update from the Modeling Committee  
Rossow reported that four applicants were interviewed and assessed for programming skills, experiences in model building, meta-analyses, database building, web page development, conflict resolution, writing skills, and ration balancing. Rossow conveyed that one applicant in particular, Di Liang, had substantial skills overall in modeling and

languages. This particular candidate's application was provided to the Coordinating Committee. Based on skills and abilities, the Modeling Committee feels the candidate is the best fit for this role. Rossow shared that the committee's sense is the candidate sees this position as a post-doctoral 2-3 year position that works very well for her. Lindemann conveyed the robustness of the interview process including the abilities to see and hear the candidates speak. Rossow shared that Liang is a PhD candidate at the University of Wisconsin, originally from China. Lindemann conveyed that if the Coordinating Committee agrees with this candidate, Lindemann will lead on next steps. Should Liang not be selected, other candidates would be contemplated at a later date. Communication capabilities were seen as solid across the final candidates. Kirk Baer inquired whether the candidates all come with dairy expertise, and Rossow confirmed most candidates have dairy expertise specifically. Lindemann shared that the Feed Composition Committee will consider candidates once the Modeling Committee identifies its selection. Based on the committee's update, the NANP Coordinating Committee approved a motion from the Modeling Committee to proceed with offering the modeling position to Di Liang. Additionally, the Coordinating Committee wishes to extend an invitation to Liang to participate in the May onsite meeting in Lexington.

4. Update from the USDA - C. Kirk Baer

Kirk Baer reported the request for applications for food and agriculture workshops has been published. Conference grants are available for meetings that will explore data collection challenges, data usage, and other aspects of data. As the federal government increases its investments into data and efficient usage of data, Kirk Baer shared that NIFA intends to best utilize its funds by prioritizing its efforts accordingly. A data initiative called "Food, Agriculture, Cyberinformatics, and Tools" is underway, and Kirk Baer indicated a conference workshop would be a great opportunity for the NANP to submit a proposal to hold a data-oriented session including animal health, feed composition, and/or other areas. Kirk Baer shared that NIFA has become more proactive with regard to data collected across agriculture, and suggested that the NANP could leverage those funds to show substantial progress with its efforts. Kirk Baer also conveyed that any aspect of data would be a valid topic for a workshop, including identification of new data, and/or discussion of previously developed data. Rossow conveyed interest in conducting a modeling methods workshop; Kirk Baer shared that the animal nutrition or animal health programming area would be a valid possibility and that she would be willing to discuss further with the subcommittee.

5. Update from NASEM

Lindemann conveyed that Schoen indicated no progress with disclaimer language at this time. Schoen will be present for the in-person meeting in May.

6. Minutes of the March 16, 2017 conference call

The committee approved a motion (Beitz moved, Cromwell seconded) to accept the minutes as distributed.

7. Previous, ongoing or old business items

Lindemann related that a letter had been drafted for submission to NASEM regarding the continued need for animal nutrition to be a key focus of the Association's efforts. Lindemann welcomes the committee's review and suggestions. Cromwell conveyed the NASEM site lists that the board leadership does not include any food-animal nutrition experts. Kirk Baer shared that one companion animal nutritionist is involved, and encouraged the committee to underscore to NASEM the need to increase the prominence of animal nutrition among the NASEM board and its activities. Caton indicated that in addition to NANP's letter to NASEM, there may be value in obtaining additional letters from related associations to advocate for increased agriculture prominence within the NASEM's board and activities.

Additionally, Lindemann indicated recent electronic exchanges with Elsevier, to reinstate forward progress on the Global Animal Nutrition Network database. Lindemann had conveyed the NANP's need to avoid spending additional funds for Elsevier activities. Lindemann is awaiting further dialog from Elsevier.

8. New business items or updates

A. Update from Feed Composition committee

There are no updates at this time. Lindemann will coordinate further with the committee related to post-doctoral candidates.

B. Onsite Coordinating Committee meeting - May 15-16, Lexington, KY

Lindemann shared the meeting will start approximately 9 AM on Monday, with plans to adjourn at approximately noon on Tuesday. Lindemann will send an email to the committee with specific instructions to procure room accommodations. Lindemann will also send an agenda to the committee in early May, alongside a set of tasks for the committee to contemplate for action at the meeting. Lindemann encouraged the committee to come to the meeting for as long as possible even if both days were not possible. Lindemann shared that the hotel has a shuttle to pick committee members up from the airport. Cromwell encouraged the group to send to Lindemann or Cromwell their arrival times into the Lexington airport for planning purposes.

9. Lindemann adjourned the meeting at 2:53 PM EDT.

**Minutes of the Coordinating Committee**  
**National Animal Nutrition Program-NRSP-9**

**Good Barn, Culton Suite**

**University of Kentucky, Lexington**

**May 15, 2017**

1. **Call to Order and Introductions:** Chair Merlin Lindemann called the meeting of the Coordinating Committee (CC) to order in the Culton Suite of the Good Barn (formerly a dairy barn) of the College of Agriculture, Food, and Environment on the campus of the University of Kentucky. All attendees introduced themselves. **Those present were:** Nancy Irlbeck, Gary Cromwell, Ryan Dilger, Del Gatlin, Brett Hess (Administrative Advisor), Joel Caton, Todd Applegate, Phil Miller, Heidi Rossow, Merlin Lindemann (chair), Charlotte Kirk Baer (USDA/NIFA), Lesley Oliver (Administrative Advisor), Robin Schoen (NASEM), Carey Williams, and Nancy Cox (UK, CAFE).
2. **Opening comments:**
  - a. **Comments from Administrators of Program:** Lesley Oliver and Brett Hess complimented CC on progress to date. They reminded us of mid-term review that is due later this year that requires us to show our impact on the animal nutrition community.
  - b. **Greetings from Nancy Cox:** We were welcomed to the University of Kentucky campus by Dr. Nancy Cox, Dean of the College of Agriculture, Food, and Environment. She reminded us that Kentucky is an animal agriculture state, with poultry being its largest animal industry. The equine industry is an \$800 million business. Cow-calf industry of Kentucky is largest east of the Mississippi River. The University of Kentucky enrolls over 29,000 students; 2,700 are in the College of Agriculture, Food, and Environment. Thanks to the efforts of Nancy Cox, along with Charlotte Kirk Baer and Gary Cromwell, the NRSP-9 project exists.
  - c. **Remarks from Charlotte Kirk Baer:** Charlotte Kirk Baer shared some good news (e.g., \$51 million more for NIFA than in 2017) as well as many uncertainties about future budgets for USDA programs. Secretary Perdue is on board, but undersecretaries still need to be appointed. The Hatch budget probably will be flat for next year, but, if decreased, our NRSP-9 budget will be decreased accordingly.
3. **Previous or ongoing business, miscellaneous**
  - a. **Minutes of Previous Meeting:** The minutes of our conference call committee meeting on April 20, 2017 were approved as written.
  - b. **Remarks from Robin Schoen:** Robin Schoen reported on several related projects ongoing at the National Academies.

- i. Regarding the “Dairy NRC”, the project, co-chaired by Rich Erdman and Bill Weiss, began in Fall 2014 and is slightly behind its projected schedule for completion and becoming short of financial support. More support will be requested. Much recent discussion by the Committee has focused on amino acid nutrition. The Committee will meet at ADSA and then again in late summer. The final publication that will contain a computer model and is expected to be in book form in 2018.
- ii. The “Poultry NRC” now has enough committed financial support to move forward. The proposed membership of the Committee is awaiting approval by the President of the National Academies of Science, Engineering, and Medicine. The scientists proposed to be members of the Poultry Committee are: Rosalina Angel, Ryan Dilger, Mark Cook, Bill Dozier, Bob Elkin, Peter Ferket, Gonzales Mateos, Sheila Purdum, Mike Persia, and Rosemary Walgem. Another member or two could be added later. The Committee proposed its initial meeting to occur at the Poultry Science Association annual meeting during summer of 2017. The goal is to have the project completed in 2020. Focus will be layers, turkeys, and broilers.
- iii. Regarding the Dog and Cat NRC, Schoen is resolving some concern raised by AAFCO regarding concentration of nutrients in the diet when fed to dogs and cats with unusually low energy requirements with the help of Gail Czarnecki-Maulden and Bill Burkholder.
- iv. Bison NRC: Another study under consideration is a publication on the nutrient requirements of bison. Serious questions regarding financial support and the adequacy of sufficient data for a publication were raised. Some wondered if the publication would include red deer and elk; it was noted that the “Small Ruminants NRC” includes red deer.
- v. Common platform: Discussion continued on the topic of developing a unified platform for models for all food animal species. The dairy model could be used as a common platform for model of other animal species. The question of ownership of the codes for models was raised and who has access to the source codes for the models. Heidi Rossow volunteered to work with Robin Schoen to make a list of what the Modeling Committee wants regarding the unified platform and source codes for models. Schoen agreed to work with Rossow to develop a common platform for teaching purposes. Initial focus will be on the Dairy model. The suggestion was made to have the Modeling Committee discuss what would happen if the source code is turned over to the NANP.
- vi. Supporters of Agriculture Research (SoAR): Co-chairs have been named by the National Academies to launch ‘Breakthrough 2030’, which is an innovative effort to determine the greatest scientific opportunities in the

next decade in food and agriculture. Over \$1 million has been raised to support this project that will, when completed, produce a document for use to inform Congress of why the country needs to invest in agricultural research.

- c. **Dairy Modeling Workshop:** Heidi Rossow informed the CC that a workshop on dairy modeling will be held at the 2017 meeting of the ADSA in Pittsburgh. Attendees will listen to presentations and then have a 'hands on' experience.
  - d. **NANP Booth at ASAS:** Gary Cromwell has arranged for a booth with a computer, brochures, pens, and USB drives to promote the NANP at the 2017 annual meeting of ASAS in Baltimore. **NANP Booth at ADSA:** Because no booths are now available at the 2017 annual meeting of the ADSA, Don Beitz will arrange for a poster to be displayed that Gary Cromwell will provide. Don needs to confirm availability of a poster board.
  - e. **Reimbursement policy:** Gary Cromwell reviewed for the Committee the guidelines to use for reimbursement of expenses of this meeting. Documents need to be returned to him within 30 days of the meeting.
  - f. **Administrative Assistant:** Because of being over committed, our previous administrative assistant, Lynne White-Shim, has been unable to continue with NANP. Thus, a proposal to use FASS for administrative services was made by Gary Cromwell. Don Beitz moved and Carey Williams seconded that we hire FASS to serve in an administrative role for NANP. Motion passed unanimously. Cromwell and Lindemann will work with FASS to establish a working contract.
  - g. **Post-doctorate for Modeling Committee:** Because Di Liang declined our offer to join the Modeling Committee as a post-doctorate, the Modeling Committee re-evaluated applicants and proposed that Veridiana L. Daley be considered. After much discussion, Don Beitz moved and Del Gatlin seconded that the NANP Committee extend an offer to Veridiana L. Daley as a post-doctorate to support the Modeling Committee. Motion passed unanimously. **Post-doctorate for Feed Composition Committee:** Phil Miller informed us that he and two members of the Feed Composition Committee will interview three candidates for the post-doctorate position on the Feed Composition Committee within the next week. Fortunately, the former post-doctorate on the Committee, Huyen Tran, is employed in Lincoln, NE and will support the new post-doctorate as needed.
4. **New business items or updates**
- a. **Mid-Term Report:** Brett Hess led a discussion of the Mid-Term Impact Report that is due fall of 2017. Each committee member is on a Station Project for NIMSS through completion of Appendix E. Seemingly, not everyone has been making individual station progress reports. Each of us is to communicate with our Experiment Station leader for expectations for reporting through individual station projects. Brett indicated that the whole NANP project will be reviewed for progress by the Administrative Advisors during May/June of 2018. If progress

is satisfactory, budget will be unchanged (could be decreased if poor progress). Progress report is to include: 1. Why work needs to be conducted by academic scientists rather than by industrial scientists, 2. How can Committee interface with industry (does Committee need an industry liaison?), 3. How work of Committee integrates into classroom and extension education programs, 4. How does the project advance the science of modeling and feed composition, 5. How do outputs relate to outcomes of creating awareness and changing behaviors and actions, and 6. What is our true impact of work on the economy, society, and environment of the U.S. Committee discussed hiring a professional evaluator to assist putting together the final impact statements. B. Jan Middendorf (Kansas State University) and Jennifer Kushner (University of Wisconsin) were suggested as potential assistants.

- b. **Website Development:** Ryan Dilger has led a subcommittee to consider alternatives to using the services of ChalkLabs of Bloomington, IN to develop and maintain the website for NANP. Fifteen companies were narrowed to three for serious consideration. Surface 51 of Champaign, IL emerged as the company of choice because of responsiveness, ease with which to work, and capability. After considerable discussion, Nancy Irlbeck moved and Del Gatlin seconded that Surface 51 be hired as NANP website designer and maintainer. Motion passed unanimously. ChalkLab will be retained to handle the Global Animal Nutrition (GANN) project.
- c. **Progress on:**
  - i. **Strategic Plan:** Gary Cromwell led an evaluation of progress on Deliverables of the NANP Strategic Plan. Results of that evaluation are as follows:
    - a. Short-term Goals—Deliverables for Goals 1 and 2 are completed, deliverable for Goal 3 is planned, and deliverables for Goals 4 and 5 are ongoing.
    - b. Longer-term Goals—Deliverable for Goal 1 is ongoing, deliverable for Goal 2 had been established and is being improved, deliverable for Goal 3 is in process, deliverable for Goal 4 will be continued, and deliverable for Goal 5 is in process.

Del Gatlin (chair), Joel Caton, and Carey Williams will re-evaluate our Strategic Plan and provide any updates at the next conference call of the Committee.
  - ii. **NANP Communication Plan:** Gary Cromwell distributed the NANP Communication Plan that was prepared by Robin White in the fall of 2015.
  - iii. **Membership Rotation:** Gary Cromwell initiated discussion of the Policy on Membership in which a rotation system for membership of the

Coordinating, Modeling, and Feed Composition Committees is described. Mixed views were expressed regarding regular vs. limited rotation of the Committee membership. Administrative advisors emphasized that consistency of the Committees during the 5-year NANP project is important for productivity and that limited turnover is common among other NRSP committees.

- d. **Financial Status to Date:** Gary Cromwell reminded us that the NANP Coordinating Committee is allocated \$230,000 per year for the 5-year project and that Year 2 started on October 1, 2016. During Fiscal Year 1, a balance of \$84,698.67 resulted and can be carried into the future. To date in Year 2, a balance of \$194,483.58 exists. Future anticipated expenses for Year 2 sum to \$187,000 with activities, meetings, and future post-doctorate salaries.
- e. **Update from Feed Composition Committee:** Feed composition data of feeds for the "Beef NRC" are available on the NANP website. Feed composition data of feeds for the "Dairy NRC" are completed but are not yet on the website. Beef and dairy data were derived from the scientific literature and from commercial nutrition laboratories. Feed composition data in "Swine NRC" are derived only from scientific literature. A letter for recruiting feed composition data from commercial sources is on the website. The new website will contain the criteria for screening of feed composition data for future NANP use.
- f. **Update from the Modeling Committee:** Heidi Rossow reported the following progress has been made:
  - i. Uploading of production data for models for beef, dairy, and swine is ongoing.
  - ii. Will be uploading production data for models of poultry and horses.
  - iii. Are evaluating new production data with existing models and noting where new research is needed. A major topic has been the question of fractionation of neutral detergent fiber into subfractions and describing fiber in a more definitive way.
  - iv. Providing support for the upcoming NRC committees with animal models.
  - v. Will be hosting a modeling workshop on dairy at the 2017 ADSA meeting.
  - vi. Hosting a workshop on modeling of poultry at a future PSA meeting.

The meeting was adjourned at 3:00 for a tour of a working Thoroughbred farm. The group then went for a working dinner of small group discussion of items of the day at Malone's Prime at 7:00 PM.

**Minutes of the Coordinating Committee**  
**National Animal Nutrition Program-NRSP-9**  
**Good Barn, Culton Suite**  
**University of Kentucky, Lexington**  
**May 16, 2017**

1. **Call to Order and Announcements:** Chair Lindemann called the meeting to order at 8:17 a.m. and welcomed Nathalie Trottier from the Modeling Committee to the meeting. Lindemann first reviewed travel logistics for those leaving later in the day. He then informed the group that he had sent an email to the post-doc candidate last night and has already received a response for her to meet by phone either Thursday or Friday of this week. Some discussion was held relative to the venue for next year's Coordinating Committee meeting. There was support for having the meeting either in Washington, DC or again on the University of Kentucky campus. The group seemed amenable to either location.
2. **Continued Update from Modeling Committee:** Rossow then finished providing an update of the modeling committee's activities. These included:
  - Preparation of data from the swine/beef/dairy NRC publications for uploading to the website.
  - Summarization and evaluation of existing models via sensitivity analysis.
  - Preparation for model development and research support for the poultry NRC.
  - Development of guidelines for doing meta-analysis.
  - Preparation for Model Workshop to be held at the upcoming ASDA meeting.

Considerable discussion ensued regarding opportunities to provide information on sensitivity analysis, as well as instruction on using R and SAS codes. Possibly a workshop could be held to guide developments to improve knowledge for subsequent NRC publications. Various suggestions were then made regarding when workshops should be held, if the products of the workshops should be posted on the website or possibly published as Short Communications or Technical Notes in a journal, and if industry might support some of these activities or be more directly involved in model development.

Nathalie Trottier then made a presentation on "Research Techniques in Animal Nutrition and Metabolism". The slides provided justification for why this is needed and potential means of implementing such as program. Discussion ensued about what form this might take such as a symposium in conjunction with established society meetings, a web conference to be posted on the website, a publication prepared for existing or new journals, compilation of research techniques for the website, or even developing a WIKI. The AFRI Conference grant was identified as a potential source of funding. Lindemann asked the committee if there were any reservations about moving forward with the conference grant and none were indicated.

A motion was made by Heidi Rossow and seconded by Todd Armstrong and Nancy Irlbeck for Trottier to proceed with developing the conference grant proposal. It passed unanimously. Trottier then briefly presented potential materials and personnel that could be included in the grant proposal.

3. **Stakeholders and Partners** - who are they and how do we engage them? Kirk Baer read from the renewal proposal a long list of primary and secondary stakeholders. How NANP interfaces with these various groups was discussed. Building relationships with these partners was viewed as important, and obtaining feedback from them desirable. It was mentioned that Extension personnel need to be involved. Identifying optimal ways to reach these various groups is needed. One forum for making information from NANP available is through the website. It was suggested that the Mission and Vision statements and Communication Plan be shared with Surface 51 to help augment the new design of the website. Development of a one-pager regarding NANP was suggested and could be distributed to interested parties through ARPAS and possibly other groups to provide stronger links between industry and the research community. It was also suggested that NANP needs to identify the appropriate message to each specific stakeholder, then find a means to contact those various stakeholders.
4. **Brainstorming:** After a break, Lindemann asked the group to suggest critical research and/or animal nutrition industry needs. Joel Caton sent an electronic copy of the chapter on research needs that was published in the beef NRC. He suggested an update of the California Net Energy System with new data was needed. Carey Williams mentioned that in the equine area there is a need to fill university teaching/research vacancies with tenure-track faculty. She indicated more lecturers are being hired to teach due to limited research funding and this is constraining the research enterprise. Todd Armstrong suggested that more feedback from stakeholders should be solicited regarding modeling information for the new poultry NRC. Ryan Dilger mentioned being somewhat discouraged about the difficulty of obtaining funding for integrative research on multiple species. He said convincing students to pursue research careers is becoming more difficult. Charlotte Kirk Baer indicated USDA is making a greater effort to fund integrative, interdisciplinary research. Phil Miller mentioned there are still numerous blanks in the feed composition tables. In particular, more details regarding different

carbohydrate fractions is needed. Merlin Lindemann mentioned the vitamins as a nutrient group that is being neglected in terms of research and teaching at several campuses. Other micronutrients also are receiving less attention. There is concern that graduate students are not receiving the breadth of education and training they need. One option is to possibly archive graduate courses on certain topics and possibly use on-line courses more frequently. Nathalie Trottier mentioned that providing quality graduate education is at a cross-roads due to limiting numbers of dual-appointment faculty being available to teach graduate students. Caton suggested federal administrators need to be engaged in conversations about the importance of animal agriculture and the need to provide more balanced funding for animal research compared to other commodities. Robin Schoen suggested more integrative and interdisciplinary research. She mentioned Science Breakthrough 2030 as one means of soliciting and obtaining new ideas for research. Don Beitz mentioned his interest in brainstorming about another potential summit concerning sustainability. This could include the important role that animal agriculture plans in using food by-products to produce edible products. This topic needs to be addressed in greater detail as it was mentioned the first summit meeting put on by NANP was two years in development.

5. **General discussion:** Some discussion of the monthly meeting times occurred and it was agreed to move the time to 2:30 p.m.

Then Lindemann prepared to close the meeting by mentioning the following action items:

- Revise NANP poster for distribution and display at various venues.
- Lindemann is to follow up on contacting the post-doc candidate for the Modeling Committee and preparing for the mid-term review.
- Gatlin, Caton, and Williams will work to review and update the strategic plan document.
- Trottier will move forward on the Conference grant and other members of the committee would assist as needed.
- Cromwell will revise the document on committee appointments and term lengths.

The meeting was adjourned at approximately 11:30 a.m.

**Minutes of the Coordinating Committee**  
**National Animal Nutrition Program – NRSP-9**  
**Special Conference Call – June 26, 2017, 2:00 PM EST**

Members present: Merlin Lindemann (Chair), Gary Cromwell, Ryan Dilger, Nancy Irlbeck, Carey Williams

1. The meeting of the Coordinating Committee was called to order at 2:00 PM Eastern by Chairman Lindemann. Lindemann thanked everyone for getting on this special call. There were no additions or changes to the agenda.
2. Feed Composition committee results of interview of postdoc candidates  
Edward Garcia and Brandon Koch were interviewed. Brandon is the first choice because he has a better statistical background, and he seems to have demonstrated more initiative and to be a self-starter in previous opportunities.

**Motion:**

The committee recommendation was that an offer be extended to Brandon Koch for the postdoc position. The recommendation passed without dissent and Lindemann will extend an offer.

3. Website feedback from Qualtrics survey  
Dilger reviewed the feedback from the survey. We will be enter the development phase this week and the new site is anticipated to launch in early August. Surface 51 was approved as our sole source for this project. Dilger has a meeting with Surface 51 later in the week to review items brought up in the Qualtrics survey or from this call. Some of the items discussed during the call were:
  - a. Whether or not to update our logo and where it should be seen on the website.
  - b. What pictures will be on the website
  - c. Where the search box is located
4. The conference call was adjourned at 2:33 PM EDT.

**Minutes of the Coordinating Committee**  
**National Animal Nutrition Program – NRSP-9**  
**Special Conference Call – July 17, 2017, 11:00 PM EST**

Members present: Merlin Lindemann (Chair), Gary Cromwell, Jack Odle, Don Beitz, Carey Williams, Heidi Rossow, Delbert Gatlin, Joel Caton

Feed Committee: Phil Miller (Chair)

USDA NIFA: Charlotte Kirk Baer

1. The Special meeting of the Coordinating Committee was called to order at 11:01 AM EDT by Chairman Lindemann.
  
2. Feed Composition postdoctoral associate position  
Per the decision of the June 26 meeting, Lindemann offered the position to Brandon Koch. Brandon communicated 7/7/17 that, at the present time, although he is very interested in our position, he cannot accept our offer of the postdoctoral position because of uncertainties about positions for which his wife is interviewing and two applications that he has for tenure-track positions. At the end of the conversation, Lindemann told Brandon that the NANP would have to evaluate our other options and we would each keep each other informed of what is happening. Lindemann then informed the Feed Composition subcommittee evaluating the postdoctoral associate options to discuss the situation. The Feed Composition subcommittee evaluated this information and brought a recommendation to the Coordinating Committee that we extend the offer of the postdoc to Edward Garcia. The situation and options were discussed.

**Motion:**

Beitz moved (Caton seconded) to offer Garcia the postdoc position. The motion passed without dissent. Lindemann will contact Garcia to set up a Skype meeting to extend the offer. After discussion it was agreed that we would like a response by July 28<sup>th</sup> if possible, but more time could be offered if needed.

3. Web address (“animalnutrition.org”) purchase  
Background: Ryan Dilger was previously instructed to secure the address “animalnutrition.org” for our new website. Actions were taken to secure the address

when it was released by the previous owner but when it was released it was obtained by another party before Dilger's request was placed. Dilger has contacted the new owner and the new owner has offered to sell it to NANP for \$1200.

The committee discussed other possible options for our main domain name. Some other names suggested were aganimalnutrition.org (available for \$20), myanimalnutrition.org, and animalnutrition101.org. Concern was expressed about whether the escalated price (\$1200) is the best use of taxpayer dollars in a climate of deep federal budget cuts, versus investing in activities such as sending 2 post docs to a meeting, when there are other possible alternative domain names at a fraction of the cost. Other sentiment offered was that the amount was simply a portion of the website redesign and the cost would be inconsequential. It was suggested we could seek an industry sponsor to cover this. The committee readily embraced that idea.

**Motion:**

Cromwell moved (Caton seconded) to proceed with the purchase of animalnutrition.org without the use of NANP funds and that Lindemann should secure a sponsor(s) to contribute the funds needed for the purchase of the name. The motion passed without dissent.

Meeting was adjourned at 12:01 PM EDT.

**Minutes of the Coordinating Committee**  
**National Animal Nutrition Program – NRSP-9**  
**Conference Call – July 20 2017, 2:30 PM EST**

Members present: Merlin Lindemann (Chair), Gary Cromwell, Jack Odle, Don Beitz, Carey Williams, Heidi Rossow, Delbert Gatlin, Joel Caton

National Academies/NCR: Robin Schoen

1. The meeting of the Coordinating Committee was called to order at 2:32 PM EDT by Chairman Lindemann.
2. Update from NRC/NASEM – R. Schoen
  - a. The NRC Poultry revision committee met July 16-17 in Orlando during the PSA meeting. All committee members were not present but there was good discussion about the Feed Composition data base. They are considering whether to apply for a NIFA grant to have workshops on what can be accomplished from a poultry model. Next steps: They will have a meeting in Nov/Dec and some conference calls between.
  - b. The revised dairy NRC - they are closing in on the final draft document and then will have one more meeting. Every chapter is drafted but there are holes in them. Then it has to go through external review so it will come out in 2018. The review committee has not been established yet.
3. Minutes of the June 15, June 26, and July 17 meeting:

**Motion:**

Beitz moved to approve the minutes from the June 15 Coordinating Committee meeting as distributed, Cromwell seconded and motion passed.

Beitz moved to approve the minutes from the June 26 Coordinating Committee meeting after adding that “some members not present on the call conveyed their vote/issues/concerns to Lindemann prior to the call”. Cromwell seconded and motion passed.

Cromwell moved to approve the revised minutes from the July 17 Coordinating Committee meeting. Odle seconded and motion passed.

4. Previous, ongoing, or old business items
  - a. Web site updates and issues

- i. Website address – current status
    - 1. Lindemann has secured \$1200 from the Midwest Swine Nutrition Conference to cover the cost of the web address. He is communicating with Lesley Oliver on the process of receiving the funds so federal funds are not mixed with donations. The committee is asked to brainstorm ideas on what we could do with large contributions in the event that we start receiving additional donated monies.
  - ii. Domain name:
    - 1. Dilger was in communication with a person and a third party for the domain name. The purchase of the domain address is set up and should be finalized this week.
  - iii. Website development status/timeline:
    - 1. Odle had Robin White send him a higher resolution of the NANP logo. There was some discussion about a new logo and at this time the committee would like to speak with White about tweaking our current logo and not spend fund with Surface 51 to create a new logo.
- 5. Modeling committee:
  - a. Report from the ADSA workshop.

Rossow said the workshop was very well attended. It helped to have others in the room going around to assist the attendees. There was a surprising number of graduate students there which was good.
  - b. General items

Rossow will follow up with the committee to send any ADSA expenses in for reimbursement.
- 6. Update from the Feed Composition committee
  - a. Garcia status:

Two hours prior to our call to extend an offer to Garcia, he received an offer from the United Kingdom for a postdoc position. Lindemann had a very good Skype call with Garcia and he thinks he will be a good fit if he accepts the offer. He will let us know his decision by tomorrow.
- 7. New business items or updates
  - a. Strategic plan review – Gatlin

The strategic plan has been updated. And a draft will be sent out to the committee for additional feedback. It will be discussed during our August 2017 meeting. The strategic plan highlighted some things since

its inception in 2010 as well as identified short term goals by 2020 and long term goals beyond 2020. .

b. Update from the ASAS booth – Cromwell

There was good activity at the booth and he expressed appreciation to everyone who helped man the booth. Cromwell suggested that next year we consider getting a booth at ADSA because it will give us greater visibility. ASAS provides the booth but there may be cost with the ADSA booth.

c. Other items

Odle recommended a film by the Institute of Food Technologists as a communication tool about the good work that Animal Scientist do. Cromwell provided the link:

<http://www.ift.org/about-us/food-evolution.aspx>

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Next meeting: August 17<sup>th</sup> at 2pm EDT

8. Adjourn at 3:36 PM EDT

## **Notes of the Coordinating Committee**

### **National Animal Nutrition Program – NRSP-9**

#### **Conference Call – August 17, 2017, 2:00 PM EDT**

Members present: Merlin Lindemann (Chair), Gary Cromwell, Don Beitz, Carey Williams, Joel Caton, Ryan Dilger

Administrative Advisors: Bret Hess

USDA/NIFA: No representative

National Academies/NRC: No representative

1. The meeting of the Coordinating Committee was called to order at 2:05 PM EDT by Chairman Lindemann.
2. Update from NRC/NASEM – R. Schoen was not present but sent an update. Jerry Huntington's first day as a BANR staff member is August 28<sup>th</sup>. The question was asked if we needed to include him on the call. If he has a similar role as Austin Lewis, it would be a good idea to have him on the call.
3. Minutes of the June 20 meeting – There were not enough people on the call for a quorum so the minutes were not voted upon. Minutes will be presented for discussion and approval at the next meeting.
4. Previous, ongoing, or old business items
  - a. Web site updates and issues
    - i. The new website is fully developed and fully deployed. Ryan Dilger put together a short survey that will ask for overall impression of the website. It will be sent out soon.
    - ii. We have a working fully functional website but changes can be made. Dilger will do a training next week with regard to how the changes can be made by NANP personnel. Feedback is currently needed from a wide range of people. With regard to the timeframe for the feedback, it is flexible and up to us on when we want to make changes/adjustments to the site. Dilger remains pleased with Surface 51 and the relationship continues to strengthen. As a marketing company they are tuned in to what we do. There has been positive feedback from the review of the website since it went live.
5. Update from the Modeling committee - The planning has begun for continuing ADSA and ASAS meeting workshops.

6. Update from the Feed Composition committee - Postdoc status: Garcia did not choose us of the two offers that he had. Phil Miller is reaching out to try to find potential candidates and the Coordinating Committee members were asked to do the same. It was also suggested that the position be distributed to the department head listserv. Lindemann will send the postdoctoral position announcement to that listserv.
7. New business items or updates
  - a. Strategic plan general overview – Caton (a member of the committee that developed the plan) commented that the plan includes: a small amount of background that listed some accomplishments, what's been done to address the previous strategic plan, short term goals by 2020, goals and deliverables, and long term goals. The strategic plan is broken out in a 2 term achievable process.
  - b. Symposium possibility for 2018 ASAS-CSAS meeting in Vancouver – Caton proposed a couple of symposiums to review critical aspects of the swine and small ruminant (sheep and goat) NRCs (which would probably be the next production animal NRCs to be revised) with the concept of laying a base foundation that future revision committees could work with. August 18 is the submission deadline for symposium titles so Lindemann did submit these to let the organizers know that we are discussing the possibility of this although a final decision has not been made yet. Committee members supported the ideas and suggested that the workshops create an atmosphere for a free exchange of ideas and issues. Lindemann will send the email with more details about the proposed symposium to the rest of the committee to provide feedback.
  - c. Other items: Possibility of early booth registration at ADSA meeting. Beitz thinks if we did something similar to ASAS it would be useful. Cromwell noted that the ASAS booth was donated and that ASAS provided the monitor and laptop used at the booth, this removing almost all costs normally associated with having a booth. Beitz will talk to Peter Studney about the possible donation of booth space.
  - d. Meeting times: We will send out a Doodle poll for possible meeting times for fall semester.
  - e. Global Animal Nutrition Network (GANN) – The last few communications have been encouraging. Lindemann communicated with Elsevier a few weeks ago and they are developing another data dump. Elsevier wanted the Scopus IDs of the Coordinating Committee members but we decided not to provide that information so that we could reserve that for our own evaluation of the thoroughness of their search. Lindeman began communications with ChalkLabs for the price of incorporation of the new data dump into the GANN

website. While Lindemann expressed hopefulness that something will get done, he does not know their timeline.

Next meeting: Will be determined.

8. Closing comments from Administrative Advisors: Hess supports the idea that Caton brought to the table about possible symposia as it is in the mission and service of this group.
9. Adjourn at 2:56 EDT.

**Minutes of the Coordinating Committee**  
**National Animal Nutrition Program – NRSP-9**  
**Conference Call – September 13, 2017 3:00 PM EDT**

Members present: Merlin Lindemann (Chair), Gary Cromwell, Nancy Irlbeck, Ryan Dilger, Don Beitz, Todd Applegate, Carey Williams, Jack Odle

Administrative Advisors: Lesley Oliver

USDA/NIFA: None present

National Academies/NRC: None present

1. The meeting of the Coordinating Committee was called to order at 3:01PM EDT by Chairman Lindemann.
2. Update from NRC/NASEM – email read from R. Schoen to Lindemann:
  - a. the dairy NRC is moving, may have a final meeting the end of this year or early 2018, expect final draft soon that will then be sent out for external review.
  - b. Regarding the poultry NRC: two members will be replaced due to a death of one member and health issues for another. The next meeting will probably be in early December in DC.
  - c. Schoen will integrate Jerry Huntington into future Coordinating Committee conference calls as he will be a point person for our committee.
3. Minutes of the July 20 meeting and August 17 meeting:
  - a. Beitz moved (Williams seconded) to approve the minutes from the July 20<sup>th</sup> meeting as distributed. The motion passed without dissent.
  - b. Beitz moved (Williams seconded) to approve the minutes from the August 17<sup>th</sup> meeting as distributed. The motion passed without dissent.
4. Previous, ongoing, or old business items
  - a. Web site updates and issues: Dilger has been getting feedback from NANP members, and everyone is encouraged to send out and get more feedback from others, especially graduate students. We are in transition from the end of phase 1 to phase 2 which will focus on the databases. Surface51 brought on a second data base specialist. They are working to determine how ChalkLabs set up in the original databases to first duplicate what was done and then change it to fit our needs.
    - i. We have 2 weeks to give responses through the Qualtrics survey or send Dilger an email for feedback.

- ii. Minimal feedback is needed on style and colors. Focus feedback on making sure it's mobile friendly. Static/Contact changes Dilger can change on his own. He needs to know if things are hard to navigate or things cannot be found
  - iii. Logo - we have what we need.
- 5. Report from the Modeling committee – Rossow sent an update that the committee is working on workshops for ASAS and ADSA meetings next year. The workshop for retention of research knowledge – Trottier is working on that, was delayed in developing a proposal to submit for funding but will reinstate the effort.
- 6. Feed Composition committee – No fall onsite meeting planned, will have spring meeting. Activity is focusing on the NANP website.
  - a. Postdoc status- there are 5 current applicants and possibly a 6th. There is one candidate that seems promising and the committee feels that he seems like a good candidate for what we need.
  - b. After discussion, it was determined that travel expenses will be covered for a committee member (as well as a member of the Modeling Committee) to attend the Livestock and Big Data conference and to gain knowledge and share with the rest of the committee.
- 7. New business items or updates
  - a. Symposium possibility for 2018 ASAS-CSAS meeting in Vancouver – Lindemann received names of people responsible for symposiums and will contact them for deadlines and criteria.
  - b. GANN update – Elsevier processing of the data has been finished and they are looking at means to transfer it to us. The data size is larger than they expected which is as we expected. ChalkLabs has the platform and programming to take what is provided, incorporate it into the website and make it query able by us.
  - c. Other items: Midterm review - Hess gave Lindemann a list of criteria that projects undergo in the midterm process review. There are 7 different criteria. Lindemann will send to the committee in the next week for comments and bullet point response and input.
- 8. Closing comments from Administrative Advisors – Oliver stated that there was a directors national meeting in 2 weeks and she would be attentive for items related to midterm reviews.
- 9. Meeting was adjourned at 4:00 PM EDT

**National Animal Nutrition Program  
National Research Support Project - 9  
Strategic Plan**

**Mission Statement**

Serve as a forum to identify high-priority animal nutrition issues and provide an integrated and systematic approach to sharing, collecting, assembling, synthesizing, and disseminating science-based information, educational tools, and enabling technologies on animal nutrition that will facilitate high-priority research across agricultural species.

This NANP was established in 2010 and has made significant progress in fulfilling its mission. Listed below are some of the NANP accomplishments to date.

**Accomplishments**

1. Assist the National Research Council (NRC) beef and dairy committees develop their feed composition databases.

***Deliverable:*** A standard platform that will be useable for all NRC publications.

***Deliverable:*** A publically available, continually updated feed information system (database on feed composition) has been made accessible from the NANP website.

2. Provide a forum for discussion and development of a research agenda that elucidates how animal nutrition can best be applied to improve human health.

***Deliverable:*** A series of targeted summit meetings to discuss critical issues in animal nutrition. The first National Summit on Animal Nutrition Research Priorities for a Healthy Society was held in September 2015 to foster communication between researchers in animal and human nutrition in the area of nutritional/physiological models and nutrition and health. Output from this meeting was collated, distributed widely, and posted on the NANP website.

3. Provide advice on modeling for NRC publications.

**Deliverable:** Rapid response and assistance (e.g., beta-testing software) for NRC committees has been provided for Beef and Dairy NRC publications.

**Deliverable:** Training sessions at meetings of the American Society of Animal Science and American Society of Dairy Science has been held in 2016 and planned for 2017.

4. Develop and implement a communications plan.

**Deliverable:** Mechanisms have been considered and some put into place to engage and inform our customers (nutrition scientists, feed industry, NRC, and government agencies) of what we are doing. Potential mechanisms to be pursued further include regular articles (every couple of months) in society newsletters, posters at national meetings, and invitations to key stakeholders to NANP meetings, among others.

5. Establish an interactive, low-maintenance, web-based collaborative expert network that serves as an “expert finder,” highlights trends in animal nutrition research publications, identifies relationships among topics, and maps expertise geographically.

**Deliverable:** A network of nutrition experts has been implemented on the NANP website for use by government agencies, public and private researchers, feed industry, livestock producers, and educators, and extension workers.

### **Short-term Goals (to be accomplished by 2020)**

1. Provide enhancements to the NANP website to augment communications with and resources for stakeholders.

**Deliverable:** A new website is being developed to enhance many components of the earlier version.

2. Provide advice on analytical methods of feed analysis.

**Deliverable:** A critical review (publication venue to be decided) on evolving (i.e., those that are not AOAC approved) analytical methods for feed analysis.

3. Determine limitations of currently available feed characterization assays.

**Deliverable:** Conduct a survey of nutrition scientists and convey results on limitations of currently available feed characterization assays.

4. Facilitate model development for other NRC publications including Poultry which is soon to be initiated.

**Deliverable:** Develop a uniform modeling platform for use by future NRC requirement committees.

5. Identify emerging or urgent topics

**Deliverable:** Identify and coordinate critical scientific reviews on relevant NRC and Animal Nutrition topics to be published in scientific journals that have been identified by NANP, the research community, industry, or government.

6. Develop a mechanism, in conjunction with NASEM, to help maintain NRC requirement publications between editions.

**Deliverable:** Correct errors in the model code, make limited changes based on compelling needs, and collect information for future use via a web-based forum.

### **Long-term Goals (to be accomplished after 2020)**

1. Identify upcoming species needs for new/revised NRC publications.

**Deliverable:** Develop a team of species-specific experts to revise current NRC publications or identify species for which new NRC publications are needed.