**SAC-2 Animal Science**

**Annual Meeting – March 27, 2025 (Virtual)**

**Meeting Report**

**Participants**

|  |  |  |
| --- | --- | --- |
| **Name** | **Institution** | **Email**  |
| Christy Bratcher | Mississippi State University | christy.bratcher@msstate.edu |
| David Gerrard | Virginia Tech | dgerrard@vt.edu |
| Francis Fluharty (Chair) | University of Georgia | ffluharty@uga.edu |
| Govind Kannan | Auburn University | gzk0062@auburn.edu |
| Hongwei Xin | University of Tennessee | hxin2@tennessee.edu |
| Jim Strickland | Clemson University | jrstric@clemson.edu |
| Ken Macklin | Mississippi State University | k.macklin@msstate.edu |
| Kim Linton | University of Tennessee | klinton1@utk.edu |
| Neal Schrick | University of Tennessee | fschrick@tennessee.edu |
| Richard Coffey | Oklahoma State University | richardcoffey@okstate.edu |
| Scott Radcliffe (Secretary) | University of Kentucky | Scott.Radcliffe@uky.edu |
| Todd See | North Carolina State University | tsee@ncsu.edu |

**Overview**

 The meeting was held virtually, and Franics Fluharty (Chair of SAC-2) started the meeting with individual introductions from participants.

Administrative Advisor, Dr. Hongwei Xin provided updates and comments relative to the group and valuable to all members involved. He discussed that the NIMSS website needs to be updated. Francis Fluharty agreed to investigate the process for getting this done. Hongwei then expressed interest in having the SAC-2 group help him collect some data on research KPI. A discussion followed on which institutions use Academic Analytics and the perceived accuracy of numbers obtained from Academic Analytics. Hongwei suggested that a template be developed and sent out to capture information from each university. Next Hongwei queried the group about any possible survey results covering animal per diem charges across universities. A discussion followed indicating that there had been some discussion and sharing on the department heads’ listserv, but no one was aware of a formal survey. A discussion followed with some institutions sharing some of their per diem fees. Committee members were asked to share per diem fees with either Hongwei or Neil Schrick. They will summarize and share back with the group. Finally Hongwei discussed the Ag Innovation Roadmap and shared the URL with the group: [2025-2035 RESEARCH ROADMAP | agInnovation | Experiment Station Section | Land Grant University Research](https://www.aginnovation.info/research-roadmap-2025)

USDA-NIFA representative, Dr. Robert Godfrey was unable to attend, but shared a report electronically, which is attached as an appendix to these meeting notes.

Francis Fluharty introduced minutes from the 2024 meeting.

*Richard Coffey made the motion to approve minutes
Scott Radcliffe seconded the motion*

*Francis Fluharty called for a vote of members*

*Motion passed unanimously*

Francis Fluharty called for nominations for the position of secretary.
*Dave Gerrard made a motion to nominate Dr. Christy Bratcher*

*Scott Radcliffe seconded the motion*

*Francis Fluharty called for a vote of members*

*Motion passed unanimously, electing Dr. Christy Bratcher as the incoming secretary for 2026, replacing Scott Radcliffe*

Francis Fluharty, Chair of SAC-2, guided the group through a review of each of the Southern Region projects. Francis will upload minutes from the 2025 meeting once they are provided by Scott Radcliffe.

**Project Reports**

**S-1081**

*Nutritional Systems for Swine to Increase Reproductive Efficiency*

Monitor: Dave Gerrard

Administrative Advisor: James Matthews

Dave Gerrard reported on S-1081 and a summary of his report is provided below:

The S-1081 (Nutritional Systems for Swine to Increase Reproductive Efficiency) group met virtually with the NCCC-42 group on January 6–7. Eight members from NCCC-42 and seven from S-1081 attended. Guests included representatives from USDA-NIFA (Bob Godfrey), National Pork Board (Chris Hostetler), AFIA (Paul David), Animal Nutrition Research, LLC (Dean Boyd), Pipestone (Gordon Strong), and DSM (Jon Bergstrom). Dr. Matthews was unable to attend, but Dr. Suman from the University of Kentucky attended in his place as monitor.

Bob Godfrey provided administrative updates from NIFA including:

* Dr. Kalavacharla was appointed Deputy Director of the Institute for Food Production and Sustainability
* Dr. Amber Campbell joined as National Program Leader for Animal Systems at USDA-NIFA

S-1081 members then discussed research projects and participated in a joint session with members of NCCC-42. The joint session featured discussions led by Jon Bergstrom, Chris Hostetler, Dean Boyd, and Paul David on:

* Vitamin availability in the U.S. market
* Swine industry updates
* National workforce developments
* Net energy and soybean meal
* AFI updates

The second day focused on business matters and planning for next year’s meeting, which is scheduled to be in-person in Nashville on January 8–9.

*Dave Gerrard made a motion that the project be continued*

*Scott Radcliffe seconded the motion*

*Francis Fluharty called for a vote of members*

*Motion passed unanimously*

**S-1074**

*Future Challenges and Animal Production Systems Seeking Solutions Through Focused Facilitation*

Monitor: Todd Applegate

Administrative Advisor: Wendy Powers?

Dr. Applegate was unable to attend the SAC-2 meeting, and asked Dr. Fluharty to present the report on his behalf. The project, now titled *"Fostering Technologies, Metrics, and Behaviors for Sustainable Advances in Animal Agriculture" (S-1074)* has been renewed for another five years, running from October 1, 2023, to September 30, 2028. By the end of 2024, the team included 18 faculty members from 14 states, with Dr. Lingying Zhao (OSU) serving as the new project secretary.

During a brief in-person discussion at the July 29, 2024, meeting in California, team members reviewed project activities. The first official meeting post-renewal was held via Zoom on February 28, 2025, organized by Dr. Zhao. Topics discussed included plans for the 2025 annual meeting and the USDA-NIFA grant application process, which may be delayed due to ongoing program reviews. Dr. Zhao proposed forming a team to develop a USDA-NIFA SAS proposal in 2025 or 2026, with further discussions planned for the official project meeting in May or June 2025.

*Francis Fluharty made a motion that the project be continued*

*Dave Gerrard seconded the motion*

*Francis Fluharty called for a vote of members*

*Motion passed unanimously*

**S-1076**

*Arthropod Management in Agriculture Systems and Impacts on Animal Health and Food Security*

Monitor: Charles Rosenkrantz (who has retired), Jim Strickland filling in

Administrative Advisor: Cliff Lamb (replaced David White)

Initial discussion indicated that there was not a report for this project, and there was confusion because the listed project monitor is retired. However, after some digging, Jim Strickland was able to obtain a report and notes from his summary of the report are below.

### The S1076 multi-state project focuses on arthropod management in animal agriculture systems and their effects on animal health and food security. The project is actively engaged in collaborative research across several institutions and has reported numerous accomplishments and impacts in its latest update.

### Notable Accomplishments & Research Highlights:

1. **Biting Flies of Cattle**
	* Horn flies and stable flies contribute significantly to economic losses in cattle operations.
	* Traditional control methods using insecticides are increasingly ineffective due to:
		+ Growing insecticide resistance
		+ Environmental concerns
		+ Rise in organic production
		+ Evolving animal management practices
	* A newly developed botanical oil-based fly repellent was tested in California and showed effective control for:
		+ 6 to 24 hours for certain fly species
		+ 24 to 48 hours for others
	* The repellent shows promise for use in commercial dairy settings.
2. **Screw Worm Control**
	* Persistent challenges remain in managing screw worm populations in southern Mexico using the sterile insect technique (SIT).
	* Current efforts require scaling up sterile fly production and irradiation capabilities.
	* Simulations indicate **E-beam radiation** could be a viable alternative to conventional sources, offering operational flexibility to USDA.
3. **Behavior Monitoring & Sensor Technology**
	* **University of California, Riverside** is developing sensor technology to monitor cattle behavior in response to fly activity.
	* This work aims to correlate behavior with fly populations to enable precision pest management.
4. **Tick and Fly Control in Equines**
	* **Penn State University** surveyed horse owners about tick infestation concerns.
	* Researchers are evaluating **wearable tick protection** devices (e.g., boots, masks) and refining fly control strategies for horses.
5. **Biological and Alternative Controls**
	* **USDA ARS (Florida)** found that house flies on low-quality diets exhibit increased mortality when infected with Beauveria bassiana fungus.
	* Efforts are underway to improve the production of parasitoids for potential use in screw worm control.
	* **University of Nebraska–Lincoln** is:
		+ Exploring **black soldier fly larvae** as a biological control method for stable flies.
		+ Investigating **garlic-based sprays** as a natural alternative for fly control in pasture cattle, in response to producer interest.

The project is highly active and reports **at least 11 distinct impacts** in its latest documentation. The breadth of participation and scope of research reflect strong multi-institutional collaboration and innovation in arthropod pest management.

*Jim Strickland made a motion that the project be continued*

*Motion was seconded by Francis Fluharty*

*Francis Fluharty called for a vote of members*

*Motion passed unanimously*

**SCC-81**
*Sustainable Small Ruminant Production in the Southeastern US*

Monitor: Todd See
Administrative Advisor: Erdogan Memili

Todd did not send report because they have not had their annual meeting for this year yet. They are going to meet at southern section meeting in about a week. 9 states and 13 faculty participating. Have a symposium at the join southern/western section meeting. Report will follow.

*Francis Fluharty Tabled further discussion pending receipt of a report*

**SERA-41**

*Improving Production Efficiency of the Beef Cow Herd in Southern Forage-Based Systems*

Monitor: Neal Schrick
Administrative Advisor:

Neal Schrick indicated that the group typically meets at southern section meeting, which is occurring in early April of this year. Therefore, the group has not submitted a formal report. He reported that the group has received approval for their rewrite, extending the project through September 2029 with a new title: *"Improving Production Efficiency of Beef Cattle in the Southeast."*. They plan to meet in a week or two and recently contributed to planning a joint symposium with the Southern and Western Section meetings, titled *"Finishing Cattle in Non-Traditional Regions: Challenges and Opportunities,"* scheduled for a Saturday during the Joint Southern and Western Section ASAS meetings.

Neal expressed concern about the National Information Management Support System (NIMSS) is listing only two participants (Lawton Stewart and Jennifer Tucker) when the group is typically larger. He suspects a possible error or that Appendix E may not have been submitted or approved. The speaker urges department heads to ensure past participants re-enroll, especially with the upcoming meeting. Neal Schrick and Hongwei Xin both agreed to look into why only 2 participants are listed.

*Neal made motion to recommend continuation of the project*

*Richard Coffey seconded the motion*

*Francis Fluharty called for a vote of members*

*Committee unanimously approved the motion*

**S-1086**
*Enhancing Sustainability of Beef Cattle Production in the Southern and Central US through Genetic Improvement*

Monitor: Mike Looper
Administrative Advisor: James Matthews?

No information was sent in advance. Dr. Trent Smith was identified at the project editor. Dr. Christy Bratcher will follow-up with him.

*Francis Fluharty tabled discussion of this project until more information is received*

**S-1093**

*Management Systems for beef cattle Reared in Subtropical and Tropical Environments*

Monitor: John Arthington
Administrative Advisor: Cliff Lamb

John Arthington was unable to attend and asked Francis to provide an update:

The group held a business meeting from November 21–24, during which officers were elected for 2024–2025. Reinaldo Cook explained NIFA reporting, noting that each state should submit only one report regardless of the number of members. For 2025, reports should be sent directly to him. 2025 will be the final year of the current multistate project, but they plan to submit a renewal. Robert Godfrey was absent. They discussed inviting new members, particularly in meat sciences and genetic. Members were encouraged to bring senior graduate students to present data at the next meeting. Barbara Reis proposed organizing university visits or tours as part of future meetings.

Joao Vendramini inquired about meeting sponsorships; the University of Florida and Texas A&M will cover the room and breakfast costs. A report is to be submitted within 30 days, and the group agreed to hold the next meeting around October 15 or early November 2025. The group plans to continue its activities.

*Francis made motion to recommend continuation of the project*

*Richard Coffey seconded the motion*

*Francis Fluharty called for a vote of members*

*Committee unanimously approved the motion*

**S-1096 (SCC-84)**

*Selection and mating strategies to improve dairy cattle performance, efficiency, and longevity*

Monitor: open
Administrative Advisor: Neal Schrick

Neal indicated that the project needs a department head monitor. David Gerrard volunteered to take on the role of monitor. Neal highlighted the success of the group’s newly rewritten project that transitioned from an SCC-84 to a formal S project. Albert De Vries and Brad Heins played key roles in leading this transformation. The group is described as very active, with strong collaboration involving the genetics group and USDA. The project has taken a new direction and includes many participants. The first meeting was held on October 22, shortly after the project's approval. Neal will send a written report for records. The next meeting is scheduled to take place during the World Dairy Expo.

*Neal Schrick made a motion that the project be continued*

*Dave Gerrad seconded the motion*

*Francis Fluharty called for a vote of members*

*Motion passed unanimously*

**General Discussion**

A general discussion ensued and briefly touched on the followed issues:

* SAC-2 participants- Heads/Chairs of Animal and Poultry Science departments automatically become members
* NIMSS website needs updating. Hongwei will confirm, but he believes Francis should have authority to make/request changes.
* Jim Strickland requested that Hongwei ask ADRs at participating institutions to make their new heads/chairs aware that they are now part of SAC-2
* Neal announced that UT has 2 open positions in precision animal health
* Francis started a discussion on the struggles of hiring meat scientists, particularly in extension. Christy pointed out that one of the challenges is that industry is paying significantly more. Dave cautioned that post-COVID uptick in small processors is likely not sustainable.

*Francis Fluharty adjourned the meeting*