

what will become their textbook which is centered on a specific aspect of meat science and (or) muscle biology. On the first day of class students are asked to write down a question pertaining to muscle (meat science, muscle biology, or growth and development). This initial assignment provides the instructor with information regarding the level and area of student interest in the broad field of meat science. From this information, the instructor can pick a broad focal point (such as The role of meat in a healthy diet) and assign a more specific topic to the individual students. The students are asked to prepare a literary review of the assigned topic and consider the paper as a textbook chapter. Students are required to research the topic, prepare an outline, write a 5-6-page paper regarding this topic, and present one 20-minute lecture. All papers are compiled by the instructor, edited, arranged in a book format, and distributed to the class prior to initiation of the student lecture section of the course. The instructor and the students of the course evaluate each student lecture. Students are also responsible for preparing 2 exam questions and answers from their respective lecture. The final exam is then developed from these questions. This format of classroom instruction is built upon the idea that individuals learn more when they have to instruct another. Often the University system is criticized for failing to instill job related skills in its students. Preparation, organization, and oral presentation skills as well as the ability to work as a team member are traits that are strongly sought after by potential employers. This style of active learning provides students with valuable job related skills and a better understanding of meat science.

Key Words: Meat Science, Teaching, Active Learning

1310 Experiences with increasing student responsibility for learning in a low enrollment course. G. E. Shook* and L. Tong, *University of Wisconsin, Madison*.

An innovative teaching approach designed to shift the focus of the classroom toward the students was implemented in a three credit, senior level

course in dairy cattle breeding. Goals included both professional and cognitive development of students. This was accomplished by making learning a collaboration between students and instructor and emphasizing long term learning over short-term recall. Students participated in selection of topics. Daily reading assignments of carefully selected scientific journal articles were accompanied by a writing assignment to stimulate thoughtful study and hold students accountable for the reading. Class periods were devoted to discussion of the reading. Content of the discussions was driven by student-generated questions with answers provided by students. The instructor served as facilitator and resource person. As needed, the instructor corrected misconceptions among students and gave impromptu mini-lectures to clarify concepts and fill information gaps. The course was structured to encourage students to take risks, try out their own ideas, and make mistakes without penalty or embarrassment. To this end, grading was based 60% on participation elements and 40% on quizzes and exams. Throughout the semester, the instructor participated in a teaching circle of six faculty in diverse fields convened by a professional in biology education. One member of the teaching circle observed one class and a member of the departmental faculty interviewed the class collectively to evaluate progress. Students completed an extensive written evaluation at the end of the semester. The following quotations are representative: "The discussion format has proven to be much more effective and thought-provoking than the conventional lecture style. More importantly, I also feel like I will actually remember what I have learned." "It was necessary to be at the class always because discussion is where I learned the most." The grading policy " . . . was good because it didnt scare me away from trying." Students embraced this dynamic, interactive learning environment.

Key Words: Student-Centered Teaching, Active Learning

WOMEN AND MINORITY ISSUES IN ANIMAL AGRICULTURE

1311 How do we fit into ADSA/ASAS: International, minorities, women. W.A. Samuels*, *Solutia, Inc., St. Louis, MO*.

The need to achieve goes beyond borders, ethnicity and gender. The need to be accepted penetrates deep and is often a need shared by many. Depending on what is driving an individual, one of these needs may be satisfied; if one is left unmet, a void is created. Persistent individuals are driven to fill unmet needs. Whether an Internationalist, a minority or a female, the needs are the same. They have a need to contribute;

and when results are accomplished, they have a need to be recognized for their contributions. Our associations can be the vehicle to create the initial launch pad to fill unmet needs. ADSA/ASAS must be an incubator where ideas are shared globally and where individuals, regardless of their accents, ethnicity and gender, can believe that they belong. This presentation will focus on how an Internationalist, like myself (born and grown up in Jamaica), and a minority in my professional organizations, fits into ADSA/ASAS, and lessons learned along the way.

Key Words: Minorities, International, Women

ADDENDUM

The abstracts below were omitted from the following sections but can be found elsewhere in this publication as noted :

BREEDING AND GENETICS

Abstract number 1012 can be found in the Production and Management Section

NONRUMINANT NUTRITION

Abstract number 1232 can be found in the Ruminant Nutrition Section

The following abstracts were inadvertently omitted from the program :

FORAGES AND PASTURES

1312 An evaluation of the feeding value of bluegrass straw pellets for growing beef and dairy heifers. J.J. Michal*, J.A. Jewett, K.A. Johnson, R.L. Kincaid, J.D. Cronrath, and S.M. Smith, *Washington State University, Pullman*.

Three studies were conducted to evaluate the feeding value of bluegrass straw pellets (BP). Holstein heifers (n=36; 247 kg) were assigned to one

of 3 levels of BP (0, 11, and 22% BP). The BP replaced alfalfa silage in the diet (DM basis). Growing beef heifer calves (n=53; 298 kg) were assigned to diets where BP were included at 0, 15 or 30% of DM. The BP replaced alfalfa hay on a DM basis. Dairy and beef heifers were fed these diets for 60d. The BP contained (DM-basis) 11.8% CP, 51.7%