## Bioethics Symposium: Bioethical Challenges in Education: New challenges and opportunities

## **319** Challenges and opportunities in teaching agricultural animal bioethics. C. C. Croney<sup>\*1</sup>, W. R. Stricklin<sup>2</sup>, and D. Scott<sup>3</sup>, <sup>1</sup>Purdue University, <sup>2</sup>University of Maryland, College Park, <sup>3</sup>University of Montana.

Decisions about acceptable agricultural systems and use and treatment of animals are ultimately based on personal and societal ethics. Thus, it can be argued that there is a growing need to create curricula that address the ethical foundations of animal agriculture. Yet, many people in animal agriculture either do not fully understand or appreciate this need, and contend that "science alone" should dictate standards of animal care and welfare. Certainly, science is necessary to make informed decisions. However, the field of ethics, rather than science has traditionally been viewed as the appropriate domain to address questions pertaining to "what should be." Despite the significant and increasing role of ethics in formulating public opinion about animals, students and professional animal scientists typically receive little or no formal ethics education. Additionally, most animal science curricula either lack an emphasis on animal welfare or include it only as a current issues topic with minimal or no specific emphasis on ethics. Faculty from 5 universities have been funded by a USDA NIFA Challenge Grant to address bioethics education in animal agriculture. The major objectives of the grant include: 1) developing teaching modules and pedagogical strategies that will facilitate fruitful student discussions instead of debate, and 2) extending the educational material and information to other animal science educators. Student participation is a necessity when including ethics in animal welfare courses. Ideally, animal science students learn even more when interacting with students from other majors who may hold differing opinions and values. Thus, it is critical that the instructor create a classroom environment in which students feel safe and free to express their opinions. Well-planned discussion questions and case studies combined with rules regarding respect for the views of all persons are as critical as a properly prepared and informed instructor. We will explore these elements as well as additional pedagogical experiences and strategies for developing agricultural animal bioethics course content that addresses farm animal welfare, policy, agricultural environmental ethics, and rural societal issues.

Key Words: agriculture, animal welfare, bioethics

## **320** Assessing the merits of animal welfare assessment tools: A philosophical framework from virtue ethics and narrative ethics. R. Anthony,\* *University of Alaska, Anchorage.*

This presentation will cover factors conscientious animal scientists and veterinarians struggling to evaluate animal welfare and to facilitate responsible discussions on the topic should consider when welfare priorities collide. The Ethical Matrix (Mepham, 2000), Ethics Assessment Process (Campbell and Hare, 1997) and the Four-Box Method (Jonsen et al., 1992) will be described and discussed in light of an ethic of outcomes and an ethic of responsibility. Limitations and strengths of each will be exposed, and a philosophical basis that is steeped in virtue and narrative ethics will be proposed to guide the ethical assessment

process. The philosophical basis of animal welfare assessment that will be articulated is motivated by the context of moral evaluation that recognizes that animal welfare is typically understood as 'feeling well, functioning well, and having the ability to perform species characteristic behaviors.' Decision-making should be integrated into habits that promote the human-animal bond and with an eye toward being a steward for the environment. Humane slaughter and euthanasia of animals will be discussed as examples of the animal welfare philosophy and how to incorporate them into animal production.

Key Words: animal welfare, animal welfare assessment, bio-ethics

**321** Challenges and opportunities for bioethicial education in extension/outreach activities. H. M. Zaleski<sup>\*1</sup> and D. Newman<sup>2</sup>, <sup>1</sup>University of Hawaii at Manoa, Honolulu, <sup>2</sup>North Dakota State University, Fargo.

This presentation will address challenges and opportunities for bioethical education in extension/outreach activities in animal agriculture. Extension's challenge is to engage both the general public and those involved in animal production on issues and ethics in animal agriculture. Effective extension personnel need to be prepared to identify issues, provide science-based knowledge, use facilitation, and discuss ethical dimensions related to production agriculture. Extension educators can teach management practices affecting animal bioethics through producer programs, such as Pork Quality Assurance Plus and Beef Quality Assurance, and present standards such as pork's We Care ethical principles. Programs are also needed to educate the public who are not involved in agriculture on animal production methods, the underlying science, and the world's food supply. Nontraditional programs that create new ways of thinking and learning provide an opportunity for extension to address critical issues in bioethics. Since 2010 Hawaii Cooperative Extension has used a case-study approach (adapted from undergraduate classes) that has been effective in helping 4-H youth understand ethical principles. The discussion is controlled by the youth with the leader in the role of facilitator, and there is no pre-determined "right" answer. Although the principles developed may lack sophistication, they have power in that the youth "own" them. Since 2008 North Dakota State University has delivered the "NDSU BBQ BOOT CAMP" program to over 3200 consumers and producers. This extension program goes out into communities and provides face-to-face education about animal agriculture; provides consumers and producers with information about the importance of agriculture and the role of society in providing a safe food supply, including topics on animal welfare; and explains the roles and activities of the extension service. Participants gave the BBQ Boot Camp program an average score of 4.6 on a 5-point scale (5 = highest). Consumers indicate that they prefer this type of programming over social media, television, and radio and that they are more likely to believe facts that are explained by experts in the field of animal agriculture. Extension personnel can play a significant role in educating society on the ethical issues surrounding animal agriculture.

Key Words: extension, bioethics, communication