Development of competencies for new graduates in small ruminant practice by utilizing a survey of current practitioners

P. M. Gibbons,1 BVetMed (Hons), MS, DACVIM(LA), DipVetEd, MRCVS; M. E. Pesato,2 DVM, DABVP
(Food Animal Practice)

1Texas Tech University School of Veterinary Medicine, Lubbock, TX 79409
2Mississippi State University College of Veterinary Medicine, Starkville, MS 39759

Introduction
There are no standardized clinical competencies for new graduates interested in small ruminant herd health, medicine and surgery. This void is obvious as other professional veterinary associations publish competency guidelines for new graduates. Small ruminants are becoming increasingly popular with the development of niche markets, low startup cost and increased interest in livestock production for home consumption by owners in suburban areas, which leads to more mixed and small animal practitioners being tasked with seeing small ruminants. A survey was sent to small ruminant practitioners in North America to gauge the type of small ruminants seen by the practice, procedures performed on small ruminants, and small ruminant disease prevalence in the practice. Results from this survey will be used to establish clinical competencies for new graduates interested in small ruminant practice.

Materials and methods
A survey was compiled using SurveyMonkey® to collect pertinent and timely information from current, practicing veterinarians working with small ruminant patients. Survey questions addressed practitioner demographics, practice structure, demographics of patients seen, time commitment to small ruminant practice, disease diagnosis and treatment incidence, and educational experience of the practitioner. The survey was sent to practitioner members of the American Association of Small Ruminant Practitioners (AASRP), and distributed more widely to the veterinary community by social media. All responses were anonymized, and responses were analyzed using descriptive statistics only.

Results
A total of 149 participants completed the survey. The mean age of practitioners was 42.2 years (range 27-75 years). Of the 149 participants, 28.86% had been in practice for 0-5 years, 20.13% for 6-10 years, 17.45% for 11-15 years, 6.04% for 16-20 years, and 27.52% for over 20 years. Eighty-six point forty-nine percent (86.49%) were female, and 12.84% were male. Practice geography showed that 2.01% worked in an urban setting, 26.86% in a suburban setting, and 71.14% in a rural setting. The number of small ruminant clients reported ranged from 1-1000. The most prevalent types of small ruminants seen in practice were pets – either sheep or goats (68.91%, 51/74 respondents), wool/meat sheep (66.22%, 49/74 respondents) and meat goats (64.86%, 48/74 respondents). Pertaining to herd health issues, respondents reported that parasite control (96.70%, 142/147 respondents) was discussed the most, followed by nutrition (93.88%, 138/147 respondents) and vaccination (91.16%, 134/147 respondents). All discussions had seasonal incidence; parasites were the most seasonal. The top 5 disease processes seen by respondents were endoparasitism (96%), weight loss (94.6%), pregnancy toxemia (90.4%), lameness (90%) and polioencephalomalacia (88.5%). Educational data collected from respondents showed that 9 respondents (6.04%) did not cover small ruminant topics in their veterinary program. Assessment of confidence level upon graduation showed that 12/105 respondents (8.05%) felt extremely confident when treating small ruminant patients, 36/105 respondents (24.16%) felt very confident, and 57/105 (38.26%) felt somewhat confident.

Significance
Based on the results of this survey, formulating publishable clinical competencies for new graduates pursuing small ruminant practice could be beneficial. Our findings show that practitioners work in urban, suburban and rural settings, reinforcing the idea that both mixed and small animal practitioners are seeing small ruminants. Our findings also provide insight into the topic areas that small ruminant practitioners require basic knowledge and skill sets in, to offer clientele. Finally, the confidence level reported by respondents indicates that most practitioners do not graduate from veterinary programs feeling extremely confident when treating small ruminant patients. Clinical competencies for practice of small ruminant herd health, medicine, and surgery can be established to aid practitioners.