Feline advocates

In conversation: Tony Buffington

This is the first of an occasional series of interviews with ‘movers and shakers’ who have helped to shape ideas and have driven the development of knowledge in feline medicine. Nicolette Joosting, a veterinarian at the Vancouver Feline Hospital in Canada, speaks with Tony Buffington in this first conversation.

Q What is it about feline idiopathic cystitis that you find so interesting?

A I think it is the opportunity to work on a mystery. I have gone from thinking that most cases were diet-related to thinking that most are a consequence of the effects of adverse early life experiences on the sensitivity of the nervous system. And I think we still have a lot more to discover. Before I retire, I plan to finish a prospective observational study of kittens from 8 weeks to 2 years of age to investigate the effects of multimodal environmental modification (MEMO) on health outcomes, obesity and Pandora syndrome. This will take 7–10 years. Developmental origins in health and disease are so important, both from the point of view of helping us understand disease, but I would say, in particular, helping us understand disease prevention. I would like to see more young colleagues researching in this field.

Q If you had to campaign on a particular feline issue, what would it be?

A I am campaigning! It is to find ways to explain the inestimable value of environmental enrichment, starting from the moment people acquire a cat and continuing for the rest of its life. I would like to help people understand cats for what they really are, rather than what they imagine them to be.

An issue facing feline medicine today is the current level of understanding of cats by many veterinarians, which limits their ability to work with them effectively and enjoyably. My proudest moment, career-wise, has been to see our enrichment work move in the direction of ‘standard of practice’ for cats, without reference to us specifically. To help with this, I am working on an iBook and a publically available iTunes U course to try to make information available to more people. At the ISFM Riga conference, I will spend a fair bit of time talking about how to identify cats and kittens at risk of ‘Pandora syndrome’, MEMO and the current information and tools we have to help.

Q What advice would you give to anyone wanting to start a career in feline medical research?

A Do a PhD in a leading laboratory studying a human disease that also occurs in cats – such as obesity, type 2 diabetes, a zoonosis – to develop the naturally occurring disease in cats as a translational animal model. This improves the chances of getting National Institutes of Health (NIH)-level funding, so both humans and cats win! In feline medicine, we are plagued by a lack of independent research funding.

Q What has been your favourite article in the JFMS and why?

A There is certainly more than one, but the article that comes to mind is by Dorothy P Laflamme and Steven S Hannah, ‘Discrepancy between use of lean body mass or nitrogen balance to determine protein requirements for adult cats’ (JFMS 2013; 15: 691–697). There are several reasons why I like this paper. Nutritionists know that nitrogen balance studies are inadequate for determining optimum protein requirements – telling other people how much protein is required is not what they do. We need to think about nitrogen balance studies as a way to determine how much protein is required...
that is a good thing. Looking at lean body mass was very interesting, and the fact that they gave minimum protein needs as 5 g/kg, at least a g/kg more than I would have guessed, is important.

What I like most about the paper is its potential implication in the current discussion about cats and carbohydrates: perhaps the true issue is not that there is too much carbohydrate but not enough protein. It would take a separate set of experiments to tease that out. Maybe if we could ask a question like that we could get people to start thinking about the carbohydrate/protein thing again, in a different way.

I think there is a whole lot more to nutrition than the ingredient composition of the diet. It is the amino acid composition, not the ingredients. One of the many challenges for nutritionists is to help people understand what is marketing and what is nutritional science. The ingredients are marketing. There is so much noise out there that the issues of body condition scoring and food puzzles and environmental enrichment are just drowned out when it comes to information on how to feed our cats. I have written on that for Vetstreet.com and I will definitely be talking about that in Riga.

Q You list in your research interests ‘personality type and learning style’ – does that morph into the FIC research in itself?

A There has been very little work done on personality type in cats, and people are going to need to work on it and develop that science. What appears to be true in human patients with central sensitivity syndromes or medically unexplained syndromes is that they tend towards a different personality style that is more nervous and anxious, or are more perceptive about their surroundings. I would certainly say that we have found that in cats as well – that they are more sensitive to their surroundings, they have higher acoustic startle responses, those kind of things. In other words, what has been found in personality types in chronic pain syndromes in humans also applies to cats.

We might have found just enough to develop the hypothesis but we haven’t tested that hypothesis. Questions are whether that personality type is due to genetics, and to what extent is it due to genetics, epigenetics and environment. One of the things I am quite interested in is the determination by behavioural studies of personality types, as behaviour depends on context, and one of the things we saw in the FIC cats is that when we brought them into the colony, not only did all their signs go away but their behaviour changed.

It can be difficult to determine personality type unless animals have been in an enriched environment for at least 6 months so that they have been able to express who they really are. I don’t know of a good way to document the quality of the environment except to ask about it; and of course that’s fraught with difficulty. Those are challenges for the next generation and I am getting to the point in my career that we are looking for people to take over this study.

Q What do you think will be the biggest change in the veterinary profession over the next 10 years?

A My biggest worry about the future is the medical education bubble, which if you believe the analysis recently published in the New England Journal of Medicine, will affect veterinary medicine first. I think that community practice, and my definition of community practice is that community practitioners are those people that do prediction and prevention – is what is undervalued. One of the problems of the increase in expenditures in medical education generally is that people continue to move into the specialties because, for a while, there is more money there. Educational institutes have run into the problem because veterinary medicine, as far as I know, is about 80% community practice and 20% speciality practice, but the universities are just the opposite, 20% of the education is in community medicine prevention and prediction, and 80% is speciality (ie, find it and fix it after it is already broken).

There is going to be a whole lot more community practice in human medicine because they see all of the savings in prediction and prevention. It is just like ‘Pandora’s syndrome’; I don’t have the answers to these things but I sure think we ought to be talking about them.

Books

Bite-sized review

Animal welfare in veterinary practice
James Yeates.
ISBN 978444334876.

Positives This book encourages practitioners to view issues from a number of perspectives, some of which may be novel, and provides strategies and tools to facilitate a logical approach to ensuring a positive welfare legacy. It is a valuable addition to a veterinary library and could be used to stimulate team discussion and promotion of welfare-focused practice.

Negatives Some practitioners may find the idea of assimilating formal welfare assessment too time consuming. While various qualitative and quantitative examples are included, the inclusion of a practice-applicable welfare assessment tool as an appendix may increase uptake.

Target audience Vets in practice.

Comment Vets can easily overlook welfare considerations in practice and it is important that we critically evaluate our inherent biases as outlined in this book. A very relevant and timely volume that highlights the veterinarian’s unique role in ensuring animal welfare.

Ratings (out of five)

Feline-specific content
Practice resource
Value for money
Overall reviewer rating
Karen Hiestand
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