Four or 5 decades ago one of the main concerns was to extend the shelf life of refrigerated processed poultry. Some *Salmonella* analyses were done but primarily indicator organisms were used. At that time *Campylobacter* were not yet recognized as a foodborne (poultryborne) enteropathogen. At present, both of these microorganisms are routinely tested for both by cultural and rapid, high tech methods. It is fairly well established as to how *Salmonella* gets into a broiler flock, but many points of cultural methodology are not yet fully understood. Even for a relatively well-understood sample type such as a chilled poultry carcass, there is no internationally recognized standard method for *Salmonella* detection; for sample size, laboratory methods, number of colonies to pick etc. For example, *Salmonella* prevalence rates on chicken carcasses can be increased or decreased depending on the sampling methods used, such as changing the portion cultured after whole carcass rinsing or changing the sample weight in neck skin. Also many studies have demonstrated that cultural techniques can influence the serotypes that are recovered from samples and certainly that along with binomial and multinomial probabilities of picking serotypes at various ratios within a medium may explain the changing serotype patterns reported during rearing and processing of poultry. Therefore, along with a better understanding of the weaknesses of our lab methods, internationally agreed upon and reliable culture methods for both *Salmonella* and *Campylobacter* in poultry from the farm to retail are sorely needed. The situation is more complex with *Campylobacter* because it is more difficult to develop reliable culture methods, particularly from dry samples because this microorganism rapidly converts to a noncultural state. Plus there is still a great deal of controversy as to exactly how *Campylobacter* gets into the commercial poultry flocks. For a young poultry research scientist, the future is very bright. Much more research is needed on both of these organisms in many different areas.

Poultry meat continues to be a significant source for human salmonellosis worldwide. Retail establishments serve as an end point sale for raw and processed poultry products. Food safety surveillance systems for raw poultry have been carried out mainly at the processing plants. That being said, it is important to monitor the status of pathogens (e.g., *Salmonella*) on raw poultry at the retail level. There are many factors (e.g., temperature abuse, cross-contamination) that could affect the prevalence and population of *Salmonella* at retail. While data on *Salmonella* on raw poultry is available in several developed countries such as US-National Antimicrobial Resistance Monitoring System-NARMS; such information is not available in many developing countries which limit the ability for international organizations such as WHO and FAO to perform risk assessments that are representative for poultry production worldwide. Due to lack of internationally agreed standards on acceptable *Salmonella* levels in raw poultry and methods of testing poultry products for the presence of *Salmonella*, various countries are formulating policies that lack a scientific basis. We conducted studies in China, Colombia, Russia and Vietnam to determine the prevalence, loads, serotypes, and antibiotic susceptibility of *Salmonella* on raw poultry at the retail level. The overall *Salmonella* prevalence on broiler chicken in China, Colombia, Russia, and Vietnam were 52.2% (n = 1,152), 26.7% (n = 1,003), 31.5% (n = 698), and 45.9% (n = 1,000), respectively. In general, *Salmonella* prevalence was not significantly associated with one retail market type. Frozen chicken had lower *Salmonella* prevalence compared with chilled in China and Colombia, but not in Vietnam and Russia. The average concentration of *Salmonella* found was 1.7 and 2.75 logMPN / carcass in China and Colombia, respectively. Most common serotypes were Enteritidis, Indiana, and Typhimurium in China; whereas Paratyphi B, Enteritidis, and Heidelberg were most common in Colombia. Moderate-to-high levels of multi-drug resistant *Salmonella* were detected in both countries.