Consumer (‘prosumer’) concerns over animal welfare and the environmental footprint of pork production dominate the media. Indeed, the discussion of alternatives to pork, both from the continued global growth in chicken consumption and advances in cellular meat production and vegetable protein alternatives, represent real threats to pork’s future. Producers and processors continue to focus genetic improvement, nutrition, and management to improve meat production efficiency. Disease mitigation and animal health limit our ability to reach the pigs genetic potential, either in terms of pigs processed per sow, or breaching the 2:1 lifetime feed conversion. Can farmers continue to gain more pigs per sow, while keeping them healthy and alive? How do we maximize meat yield per carcass without losing flavor and the consumer experience? Are there limits to how low we can go in the conversion of nutrients into feed? Despite increased consumer demands and the continued need to improve production efficiency, the management of pigs has changed little in the last decades, often relying on decades old innovations and enhanced biosecurity. Innovations such as vertical hog farms in China, multi site production, and new feed technologies offer incremental but not disruptive improvements. The 10 digital technologies (PWC) is a useful framework to review the technologies with the potential to transform swine production. These are 3D Printing, Internet of Things, Artificial Intelligence, Data Analytics, Cloud Computing, Robotics, Drones, Blockchain, Virtual Reality and Augmented Reality (‘Metaverse’). Concepts such as precision nutrition, precision management recognize the need for better data, and data underpins advances such as nutrigenomics, microbiota and the environment of the pig. Digital technologies can disrupt pork production while offering the opportunity to respond to consumers, legislators, producer demands and other actors within the pork production chain.

The purpose of the study was to conduct a qualitative exploration of barriers and recommendations from women leaders in science and agriculture. This study used a voluntary sample descriptive survey design that included 8 demographic, 11 importance/satisfaction, 7 negative/positive attribution, 11 barrier, and two open-ended questions. Responses were collected over a one-week period using social networking sites for women leaders in science and agriculture resulting in 60 respondents. The average respondents were all women in leadership roles in science and agriculture, 44 years old, married, with no children, making between $60-120,000 per year, who were also highly educated with a Masters or Doctoral degree and traveled more than two-three times per month. This study focused on responses of the two open-ended questions. Comments to the questions: “If there was one piece of advice you could go back and give yourself when you began your career, what would you share?” and “Please let us know if there was something else you wanted to share related to women in leadership roles in science and agriculture” resulted in 72 individual responses analyzed using the constant comparative method. Peer debriefings and inter-coder reliability were used to ensure trustworthiness and credibility. The qualitative analysis resulted in the following emerging themes: Having it all, Personal Development and Education, Personal Advocacy, and Networking. Though the results of this study are limited to this group of respondents, it is an important step in understanding the nuanced issues women face in leadership roles. One participant summed it up by stating: “The "take this opportunity now because it might never happen again" advice I was given for my career, I used too much... and sometimes...the opportunities DO happen again... your life doesn't though, and at the end of the day, it's your family and health that stick.”