The application of technology within the animal space to facilitate real-time management decisions has the potential to transform swine production in the USA. Generation and adoption of precision management technologies in swine production specifically could lead to substantial improvements in productivity, welfare and health of pigs and subsequently increased profitability of pig production. MSU Extension and the Department of Animal Science are seeking to fill a 3 year, fixed-term faculty position to conduct extension programming (75%) and applied research (25%) focused on precision swine management.

The successful candidate is expected to deliver extension programming that is industry-responsive, proactive, and related to management of swine, especially focused on precision management. The candidate is expected to build strong relationships with the Michigan swine industry, state and federal agencies, and faculty and extension educators at MSU and in the region. The successful candidate will collaborate with others to identify stakeholder needs, develop science-based information, organize and deliver extension programs, and to report on and evaluate program impacts. The position includes the expectation to work with preliminary data generated by others in the swine group and the individual will be mentored by senior faculty who will provide further training and opportunities for professional development. The individual will participate with the appropriate Extension work group(s) and report against the group(s) plan of work.

The successful candidate is expected to conduct applied research related to precision management of pigs, including aspects such as management, welfare, and genetic improvement. These projects may involve using applications for animal identification and phenotyping as well as developing science-based solutions to improve the health, welfare and profitability of pig production systems.

**Minimum Qualifications**

The ideal candidate will have a PhD in Animal Science or in a related discipline that includes a focus on precision livestock systems. Excellent written and oral communication skills and demonstrated capacity for teamwork in interdisciplinary environments is a must.

Expertise related to current swine production and management practices is strongly preferred.

The ideal candidate will have good computer programming skills with knowledge of at least one commonly used language in data sciences or engineering (e.g., R, Python, Matlab, C++, etc.).
The ideal candidate will be willing to translate technologies in development into practical applications to pork production systems.

**Desirable Qualifications**

Candidates that meet minimum qualifications and have prior experience in outreach or extension programming and be prepared to develop and submit research and outreach proposals

**Background and employment conditions**

The swine industry in the state of Michigan is growing. Currently ranked 13th among states in the number of breeding animals, and one or two positions better than that in market animals, the addition of a new packing plant in 2018 has led to new production capacity in Michigan. Michigan’s industry is predominantly characterized by the use of modern, intensive production practices and facilities. Michigan producers are forward thinking and at the forefront of participation in audit programs focused on food safety and animal well-being.

Currently, the MSU Extension pork work group includes specialists in Animal Science, Large Animal Clinical Sciences, BioSystems Engineering, Agricultural Food and Resources Economics and Occupational and Environmental Medicine as well as Extension Educators in the field. Current research in swine precision management at MSU includes computer vision and wearable technology approaches to individual- or group-level phenotyping (e.g. continuously monitoring growth, feed intake, welfare, aggression) and the adoption of technology to optimize the work of on-farm personnel.

Salary: Competitive and commensurate with qualifications and experience.

**How to apply**

**Interested in Applying?** To apply, applicants must submit an application at the MSU Human Resources site at [http://careers.msu.edu/cw/en-us/job/502134/specialist-outreachfixed-term](http://careers.msu.edu/cw/en-us/job/502134/specialist-outreachfixed-term) and upload a letter of interest, CV, research statement, extension statement, and contact information for 2 references.

Please send inquiries regarding the position to Chair of search committee: Dr. Juan P. Steibel, steibelj@msu.edu, please include “Academic Specialist Position Precision Swine Management” in the subject. For questions about the application process, please contact Robbyn Davenport, 517-355-8383, smithro@msu.edu.

**Summary of Health Risks**

Animal contact and working in environments where animals are housed.

**Website**

[www.ans.msu.edu](http://www.ans.msu.edu)

MSU Statement Michigan State University has been advancing the common good with uncommon will for more than 160 years. One of the top research universities in the world, MSU pushes the boundaries of discovery and forges enduring partnerships to solve the most pressing global challenges while providing life-changing opportunities to a diverse and inclusive academic community through more than 200 programs of study in 17 degree-granting colleges.
Michigan State University is an affirmative-action, equal-opportunity employer. MSU is committed to achieving excellence through a diverse workforce and inclusive culture that encourages all people to reach their full potential. The University actively encourages applications and/or nominations of women, persons of color, veterans and persons with disabilities.