



American Society of
Agricultural and Biological Engineers

Call for Papers

The 2023 Safety for Emerging Robotics and Autonomous Agriculture Revised 4/28/2023

More than 80% of agricultural digital technologies are currently in the research and testing phase highlighting the dawn of a digital revolution in agriculture. This will impact almost everything from how farmers farm their lands to the safety of agricultural fields. With agriculture considered the most dangerous industry in the US, it is important to understand how this transformation will impact safety in agriculture. Stakeholders from industry, farming community and government entities have expressed pertinent concerns with autonomous robotics and safety.

This provides a unique opportunity to evaluate and address potential safety concerns to labor and the environment before the widespread adoption of these technologies.

Before widespread adoption, these four areas need to be investigated:

1. Understanding the risk associated with agricultural robotic technology. This includes risk of injury, financial risks, insurability, risk potential for different scales of technology, and evaluating risk due to continuous software improvements.
2. The role that regulation and standards will play in the adoption of safe digital technologies. This includes examining what local, state or federal laws and policies could hinder (or benefit) adoption of autonomy in agriculture, existing standards and gaps within standards, how are manufacturers implementing standards, and what are safety critical IP that need to be encouraged to remain in public domain.
3. Review existing research efforts (and gaps in research efforts) to investigate the role that new digital technologies play in farmworkers safety and health and documentation of injuries and fatalities associated with new technologies.
4. Workforce implication of new technology adoption, including training needs, cultural implications, impact on labor supply and rural connectivity.

This Special Collection of peer-reviewed papers presents works that discuss current information; gaps in knowledge; and research needs that connect to issues such as risk, insurability, regulations and policy, workforce, and societal implications.

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Instructions for interested authors:

1. Submit your manuscript to Journal of Agricultural Safety and Health before, April 20th, 2023
2. Submission will follow ASABE procedures (<https://www.asabe.org/JournalAuthors>) and should use the latest template (<https://www.asabe.org/ManuscriptTemplates>).
3. Indicate in the submission letter that the manuscript should be considered for the Safety for Emerging Robotics and Autonomous Agriculture Special Collection. Send an e-mail to the Editor (michael.pate@usu.edu) indicating your Collection submission.
4. Papers included in the Special Collection will receive several additional benefits:
 - The first three printed pages will be free. (Full page charges will apply to the remaining pages.)



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- Public access will be free for the remainder of the year of publication plus two additional years (i.e., through 2026). Open access may be purchased by authors at a discounted rate.
 - Papers will be highlighted in an introductory article and will include an identifying logo.
1. July 25th – Submit articles for review
 2. August 25th – First Decision
 3. September 25th – Submit for revision
 4. October 25th – Second Decision
 5. November 25th – Final Submission