

## Food Safety Innovations and Preventive Controls during Fresh-cut Produce Washing and Retail Display Project Virtual Meeting

(October 1 & 8, 2020)

Day 1 – October 1		
Time (EDT)	Topics	Speaker*
11:00 am	Opening remarks	Y. Luo
<b>Session 1: Improving food safety of leafy greens, tomatoes, and papayas during fresh-cut and packing house wash operations</b>		
11:10 am	Preventing <i>Salmonella</i> cross-contamination during tomato dump tank operation – the roles of sanitizer strength, plant debris and particulates	P. Millner
11:30 am	Effects of tomato dump tank temperature differential, dipping time, and tomato variety on internalization of human and plant pathogens, and market disease development	Y. Luo
11:50 am	Evaluation of <i>Salmonella</i> cross-contamination associated with cleaning tools for papaya washing	X. Nou
12:10 pm	Monitoring pathogen cross-contamination during commercial fresh-cut produce wash process using indigenous microflora	Y. Luo
12:30 pm	Microbiome dynamics on fresh produce, in wash water, and in processing environments, and their relevance to produce safety	X. Nou
12:50 pm	Q&A and data gaps	P. Millner (moderator)
1:30 pm	Break (30 min)	
<b>Session 2: Important factors to consider when monitoring organic load, chlorine demand, and antimicrobial strength</b>		
2:00 pm	The use of ORP to estimate free chlorine in fresh produce washing operations: possibilities and limitations	P. Millner
2:20 pm	Monitoring wash water organic load and chlorine demand – key parameters and their correlations	Y. Luo
2:40 pm	In-depth understanding of commodity-specific chemical oxygen demand and chlorine demand and their implication on water treatment and sanitizer replenishment	Z. Teng
3:00 pm	Monitoring microbial load in the presence of chlorine in wash water – importance of sufficient chlorine neutralization	Y. Luo
3:20 pm	Q&A and data gaps	C. Hapeman (moderator)
4:00 pm	Day 1 meeting adjourn	

\*Speakers P. Millner, Y. Luo, X. Nou, and C. Hapeman are from USDA-ARS; and Z. Teng is affiliated with U. Maryland and USDA-ARS

<b>Day 2 – October 8</b>		
<b>Session 3: Advancing understanding of fresh-cut washing processes and developing novel technologies to improve disinfection efficacy</b>		
11:00 am	Evaluation of a novel non-immersive fresh-cut produce wash during commercial operation	P. Millner
11:15 am	Wash produce vertically? Pilot plant trials of a novel in-flight washer	Y. Luo
11:30 am	Fluid mechanics computations for removal of organic exudate and residual sanitizer from fresh-cut produce	A. Pearlstein
11:45 pm	Fluid dynamics and interfacial flow consideration in produce wash process	L. Bourouiba
12:00 pm	Q&A and data gaps	Y. Luo (moderator)
12:30 pm	Break (30 min)	
<b>Session 4: Improving food safety through temperature management at retail stores</b>		
1:00 pm	Dynamics of human pathogen, native microflora, and product quality under elevated storage temperature	Y. Luo
1:15 pm	Temperature profiling of open- and closed-doored produce cases in retail grocery stores	K. Vorst
1:30 pm	Improving temperature management and retaining quality of fresh-cut leafy greens by retrofitting open refrigerated retail display cases with doors	J. Brecht
1:45 pm	Dollar\$ and cent\$: does adding doors to open cases impede consumer purchase of salads?	G. Thompson
2:00 pm	Q&A and data gaps	A. Shaw (moderator)
2:30 pm	Break (30 min)	
<b>Session 5: Project team’s future plans and stakeholders’ wish list</b>		
3:00 pm	Open dialogue	Y. Luo (moderator)
3:50 pm	Break (20 min)	
<b>Session 6: Project team and Stakeholder Advisory Board meeting</b>		
4:10 pm	Open dialogue	Team and advisors
5:00 pm	Meeting adjourn	

*Speaker A. Pearlstein is affiliated with U. Illinois; L. Bourouiba with MIT; K. Vorst and A. Shaw with Iowa State U.; J. Brecht with U. Florida; and G. Thompson with U. Arizona.*