

Table 1. Collaborations (previous 5 years) between Participant Institutions. Shaded areas of the matrix indicate collaborating institutions.

UA	AU	Clemson	CSU	Cornell	ISU	LSU	Mich St U	Miss St U	NCSU	OSU	PSU	RU	SU	TAM	TT	UCD	UD	UF	UGa	UK	UM	MizU	UN	UT	VT	WSU	UW	
■			■	■	■		■	■		■	■		■	■			■		■	■			■	■				UA
	■		■	■	■		■	■		■	■		■	■			■		■	■				■	■			AU
		■	■	■	■		■	■		■	■		■	■			■		■	■					■	■		Clemson
			■	■	■	■	■	■		■	■		■	■			■		■	■			■	■			■	CSU
				■	■	■	■	■		■	■		■	■			■		■	■				■	■			Cornell
					■	■	■	■		■	■		■	■			■		■	■				■	■			ISU
						■	■	■		■	■		■	■			■		■	■				■	■			LSU
							■	■		■	■		■	■			■		■	■				■	■			Mich St U
								■		■	■		■	■			■		■	■				■	■			Miss St U
									■	■	■		■	■			■		■	■				■	■			NCSU
										■	■		■	■			■		■	■				■	■			OSU
											■		■	■			■		■	■				■	■			PSU
												■		■			■		■	■				■	■			RU
													■			■		■	■					■	■			SU
														■			■		■	■				■	■			TAMU
															■		■		■	■				■	■			TT
																■		■	■					■	■			UCD
																	■		■	■				■	■			UD
																		■		■	■			■	■			UF
																			■		■	■			■	■		UGa
																				■		■	■			■	■	UK
																					■		■	■			■	UM
																						■		■	■			MizU
																							■		■	■		UN
																								■		■	■	UT
																									■		■	VT
																										■	■	WSU

UA – University of Arkansas; AU – Auburn; Clemson – Clemson University; CSU – Colorado St University; Cornell – Cornell University; ISU – Iowa St University; LSU – Louisiana St University; Michigan St U – Michigan State University; Miss St U – Mississippi State University; NCSU – North Carolina St University; OSU – The Ohio State University; PSU – Penn St; RU – Rutgers University; SU – Southern University; TAM – Texas A&M University; TT – Texas Tech; UCD – University of California, Davis; UD – University of Delaware; UF – University of Florida; UGa – University of Georgia; UK – University of Kentucky; UM – University of Minnesota; MizU – University of Missouri; UN – University of Nebraska; UT – University of Tennessee; VT – Virginia Tech; WSU – Washington State University; UW – University of Wyoming

Table 2. 2012 Publications related to foodborne pathogens, from keyword search on web of science, January 23, 2013. Listed by total number of publications

Pathogen	Number of publications
<i>Staphylococcus aureus</i>	19,074
<i>Salmonella</i> spp.	11,072
<i>Listeria monocytogenes</i>	2,063
<i>Bacillus cereus</i>	1,208
<i>Campylobacter</i> spp.	1,137
<i>E. coli</i> O157:H7	1,036
<i>Shigella</i> spp.	950
<i>Toxoplasmosis</i>	872
<i>Cryptosporidium</i>	701
<i>Giardia</i>	604
Norovirus	570
<i>Clostridium perfringens</i>	562
STEC	330
<i>Vibrio</i> spp.	59
Total	40,238

Table 3. Collaborations (previous 5 years, current, or planned) between Participant and invited Institutions

		UA	AU	Clemson	CSU	Cornell	ISU	LSU	Mich St U	Miss St U	NCSU	OSU	PSU	RU	SU	TAM	TT	UCD	UD	UF	UGa	UK	UM	MizU	UN	UT	VT	WSU	UW	
New Partners	UH																													
	UPR																													
	UAF																													
	UM																													
	URI																													
	UMD																													
	ITT																													
	NMS																													

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UH – University of Hawaii; UPR – University of Puerto Rico; UAF – University of Alaska, Fairbanks; UM - University of Maine; URI – University of Rhode Island; UMD – University of Maryland; IIT – Illinois Institute of Technology; NMS – New Mexico State University

Table 4. Comparison of SDC346 to current projects in the NIMSS database.

Project Title	Project Objectives	Relationship to SDC346
NC1023: Engineering for Food Safety and Quality.	Advancing the study of thermal and non-thermal processing technologies.	Focuses solely on food processing technologies: SD346 focuses on all aspects of microbial food safety including microbial ecology, microbial epidemiology, disease prevention, detection of pathogens, and risk analysis. Our team studies food safety, including processing technologies, studies the issue holistically in the context of how individual interventions may complement each other and result in synergistic effects on food safety.
NC1041: Enteric Diseases of Swine and Cattle: Prevention, Control and Food Safety.	Understanding how zoonotic pathogens cause illness in swine and cattle.	Focuses on diseases related to food producing animals. SD346 focuses on foodborne diseases related to food producing animals as well as fresh fruits and vegetables, and dairy products.
NE1028: Mastitis Resistance to Enhance Dairy Food Safety.	Coordination of multidisciplinary research efforts on mastitis that are being conducted at various laboratories throughout the United States.	Focuses solely on mastitis prevention. SDC 346 focuses on foodborne diseases related to food producing animals as well as fresh fruits and vegetables, and dairy. Only a very few mastitis – causing pathogens are of food safety concern.
NC1183: Mycotoxins: Biosecurity, Food Safety and Biofuels Byproducts	Research related to the biosecurity, economy, and toxicity of mycotoxins.	Focus is on mycotoxins, a chemical contaminant of grains. SDC346 is not focusing on chemical and biological toxicants.
S_TEMP2882: Fly Management in Animal Agriculture Systems and Impacts on Animal Health and Food Safety	The project will provide quantitative data to analyze fly-borne spread of pathogens from animal production systems into the urban environment and the ability to assess the risk of fly-borne illness associated with different production techniques and distances from production facilities. The project will also develop new control technologies for biting and nuisance flies.	Focus is exclusively on flies and the role they play is dissemination of disease among animals used to produce food. SDC346 focuses the safety of plant derived foods, as well as those produced from animals.

<p>S294: Quality and Safety of Fresh-cut Vegetables and Fruits</p>	<p>Studies related to the survival and persistence of viable or infectious human pathogens under environmental conditions occurring in produce handling and processing facilities, on harvested crops, and on intact or fresh-cut products.</p>	<p>The SDC346 proposal focuses on the safety of foods produced from animals, seafood, complex food products and dry foods as well as fresh-cut products produced from plants.</p>
<p>W3122: Beneficial and Adverse Effects of Natural Chemicals on Human Health and Food Safety</p>	<p>Examination of the role that natural foodborne toxicants, cancer chemopreventives, botanical estrogens, dietary fiber, immune modulators and antimicrobials play in human health and disease.</p>	<p>The SD346 proposal does not focus on chemical aspects of food safety.</p>