

Developing a recombinant antibody-based biosensor for rapid detection of salmonella in foods

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V(A). Planned Program (Summary)

1. Name of the Planned Program

Developing a recombinant antibody-based biosensor for rapid detection of salmonella in foods

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
712	Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occurring Toxins				100%
	Total				100%

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2007	Extension		Research	
	1862	1890	1862	1890
Plan	0.0	0.0	0.0	1.8
Actual	0.0	0.0	0.0	2.1

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
0	0	0	86863
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	0	0	66042
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Conduct laboratory experiments to develop a biosensor.
 Conduct field trials to evaluate the biosensor.
 Transfer the developed technology to end users.

2. Brief description of the target audience

The sensor and analytical protocol developed in this project can be adapted as a rapid detection method by meat and poultry processors.

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
Plan	0	0	0	0
2007	0	0	0	0

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year Target

Plan: 0

2007: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan			
2007	0	1	1

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

Commercializable diagnostic assay for rapid detection of Salmonella in food.

Year	Target	Actual
2007	0	0

Output #2

Output Measure

Publications relating to rapid detection of Salmonella in foods

Year	Target	Actual
2007	1	1

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V(G). State Defined Outcomes

O No.	Outcome Name
1	Scientific publications concerning rapid detection of Salmonella in foods
2	New technologies developed to detect Salmonella in foods
3	Transfer of new Salmonella detection procedures to commercial food industry

Outcome #1

1. Outcome Measures

Not reporting on this Outcome for this Annual Report

2. Associated Institution Types

3a. Outcome Type:

3b. Quantitative Outcome

Year	Quantitative Target	Actual
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3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
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V(H). Planned Program (External Factors)

External factors which affected outcomes

Appropriations changes

Government Regulations

Competing Programmatic Challenges

Brief Explanation

V(I). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

Retrospective (post program)

During (during program)

Evaluation Results

{No Data Entered}

Key Items of Evaluation

{No Data Entered}