

# **Panel: Critical Pathways to 21st Century National Security Careers**

Edu B. Suarez-Martinez, Ph.D.  
Third Annual DHS University Network Summit  
March 19, 2009  
Washington, DC

**But First...**

**The Training, Networking, and  
Writing...**

# Early detection of Avian Influenza Virus Carriers and Infected Birds

**FAZD CENTER**

NATIONAL CENTER FOR FOREIGN ANIMAL  
AND ZOOLOGIC DISEASE DEFENSE

**Presented by:**

**Edu B. Suárez, Ph.D.**

**Noried M. De Jesús Velázquez**

**Mentor:**

**Blanca Lupiani, Ph.D.**

**DHS Summer Research Team Program  
for Minority Serving Institutions**



# 10-weeks



Sample collection



Hemagglutinin Test

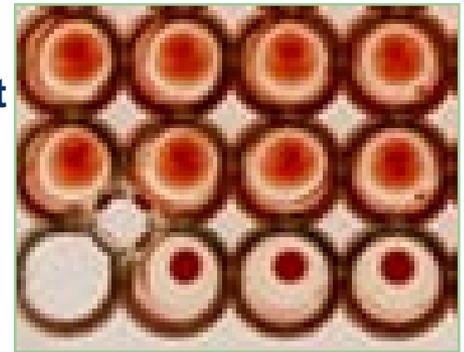


Allantoic fluid collection

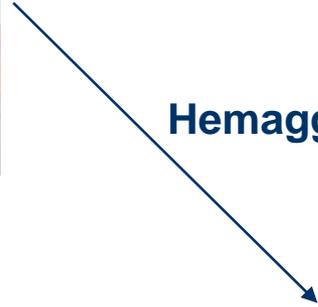
Egg Inoculation



AIV FluDetect



Hemagglutination Inhibition Test



August, 2007



# Follow up Research Grant

AIV Surveillance Program in Pigeons  
and Migratory Ducks

# FAZD @ Texas A & M AgriLife Research



# The “Experimental Squad”











Homeland  
Security

## University Programs

Science and Technology Division

Scientific Leadership Award

Integrated Strategies for increasing  
Understanding, Preparedness,  
Response, and Research in Terrorism at  
the UPR-Ponce



FAZD CENTER

START 

# Impact:

- Development of DHS-related curricula
  - Introduction to terrorism: A comprehensive Approach
  - First Responders
- Support Student Summer Internships at COE
- Collect data about students' knowledge and interests about DHS, DHS mission, and goals
  - Survey over 1,000 participants
- Development of *Avian influenza* Surveillance Program in Puerto Rico

<b>Week #</b>	<b>Topic</b>	<b>Hours</b>
<b>1.</b>	Terrorism: Introduction, Definitions & History	3.0
<b>2.</b>	Causes of terrorism	3.0
<b>3.</b>	Psychology of terrorism	3.0
<b>4.</b>	Terrorism: The players and played	3.0
<b>5.</b>	Terrorism: The players and played	3.0
<b>6.</b>	Women in Terrorism	1.5
	Weapons of mass destruction vs “Suicide Bombers”	1.5
<b>7.</b>	Bioterrorism	3.0
<b>8.</b>	Counter-terrorism: What is done, what needs to be done	3.0
<b>9.</b>	Government Policies/International Laws	3.0
<b>10.</b>	Economic Impact of Terrorism	3.0
<b>11.</b>	The Media and Public Perception	3.0
<b>12.</b>	Quantitative Methods	1.5
	Game Theory	1.5
<b>13.</b>	Introduction to Emergency Preparedness and Response	2.0
	Invited Speaker	1.0
<b>14.</b>	Students Contribution to the course (Lead by students)	3.0
<b>15.</b>	<i>Simulation</i> : International Panel: (Specific topic will be selected by that time as appropriate according to current issues)	3.0
<b>Total</b>		<b>45</b>



