

# ***Frontier: an inter-institutional, interdisciplinary model for homeland security education***

Related papers, tools, and podcasts available at <http://frontier.k-state.edu>

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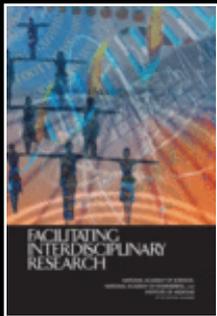
**National Center  
for Food  
Protection and  
Defense**

**National  
Center for  
Border  
Security and  
Immigration**



# **Why adopt interdisciplinary approaches to homeland security education?**

**Thought leaders and thought-leading institutions, including the National Academies, tell us to do it.**



Committee on Facilitating Interdisciplinary Research,  
Committee on Science, Engineering, and Public Policy  
(2004). *Facilitating Interdisciplinary Research*.  
Washington, D.C.: The National Academies Press.

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**André Downs, January 2008: “Today’s students need to learn how to *think horizontally* across disciplines.”**

**The Dept. of Homeland Security  
and other employers seek it.**



**Single most desired *skill*:**



“Ability to read large amounts of material, draw logical conclusions and communicate those conclusions clearly and concisely in writing and orally.”

**“*Thinking skillfully*” also highly valued...**

# Targeted skill development at *Frontier*

1. **Critical thinking skills**
2. **Ability to document one's thinking**
3. **Writing skills**
4. **Attention to detail**
5. **Delivery of effective presentations**
6. **Ability to think across academic disciplines**
7. **Appreciating the complexity of Homeland Security**

# Frontier's approach

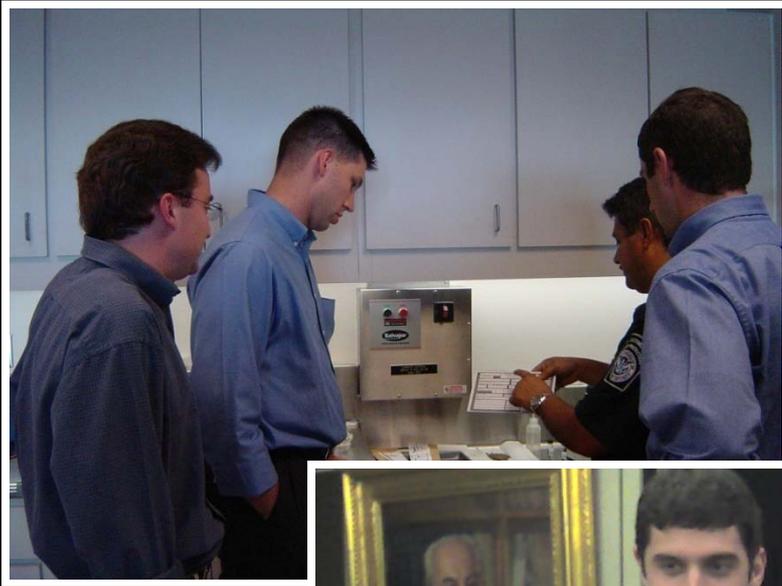
*“Co-mentoring allows students to have direct relationships with researchers in the different fields...” (p. 67)*

Committee on Facilitating Interdisciplinary Research, Committee on Science, Engineering, and Public Policy (2004). *Facilitating Interdisciplinary Research*. Washington, D.C.: The National Academies Press.

*“... students are the integrating glue.” (p. 62)*

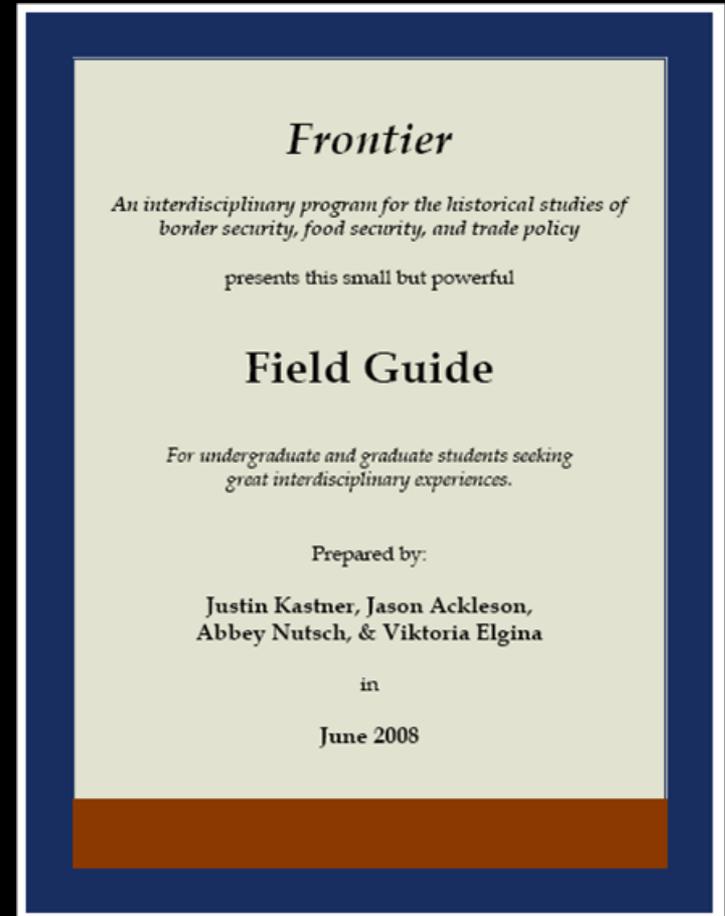


# What is the common *Frontier* experience?



All students get their “FIX”

**The *Frontier*  
Interdisciplinary  
eXperiences (FIX)  
program**



# FIX projects: HS-STEM CDG graduate students

	<b>CDG-funded student</b>	<b>FIX project title</b>
 A portrait of Katie Krusemark, a young woman with long dark hair, wearing a white top and a black necklace, smiling against a background of green trees.	<p>Katie Krusemark</p> <p>Food Science graduate fellow (KSU)</p>	<p>Formulaic decision making trees and checklists versus fostering awareness for improved decision making capacity in issues of food safety and defense</p>

	<b>CDG-funded student</b>	<b>FIX project title</b>
 A portrait of Rose Ann Vasquez, a woman with short dark hair, wearing a dark blazer over a white collared shirt and a necklace, smiling against a dark background.	<p>Rose Ann Vasquez</p> <p>Political Science graduate fellow (NMSU)</p>	<p>Examining multilateral cooperation in food security efforts in a globalized world</p>

# FIX projects: HS-STEM CDG undergraduate students

	CDG-funded student	FIX project title
	<p>Julianne Jensby Food Science</p> <p>Undergraduate scholar (KSU)</p>	<p>A cultural and historical study of the <i>Security and Prosperity Partnership of North America's</i> effects on public health</p>
<p><i>Summer 2009 DHS HS-STEM internship: Los Alamos National Laboratory</i></p>		

	CDG-funded student	FIX project title
	<p>Talia Lapid Political Science</p> <p>Undergraduate scholar (NMSU)</p>	<p>The convergence of political and criminal trafficking networks on the border</p>
<p><i>Summer 2009 DHS HS-STEM internship: National Consortium for the Study of Terrorism and Responses to Terrorism</i></p>		

## What FIX students say: pathways to success

One CDG-funded FIX student remarked how a Port of Entry site visit helped her better understand Food and Agriculture Security:

“Suddenly everything [the *Frontier* retreat, lectures, etc.] clicked, and I saw how relevant food security issues are and what that looks like on the ground.”

Another FIX student’s comment on his overall experience:

“[*Frontier* faculty] consistently provided me opportunities I never would have been afforded in college.”