

Getting the Word Out: Telling our Story

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References

Jacobson, S.H., 2006, "How to Survive Your 15 Minutes of Fame," *ORMS Today*, 33(6), 30-34.

Jacobson, S.H., 2014, "Confessions of a NSF Program Director," *ORMS Today*, 41(5), 34-36.



Getting the Word Out

- Most academic research is not of interest to the general public, and hence, not to the media
- What is of interest often has to be packaged appropriately
- It is **our job** to do the packaging



Why Should We Care?

- Visibility for the field
- Visibility creates “buzz” around what is happening in the field
- Visibility creates new opportunities



Why Should We Care?

- Establishes relevancy of academic research
- Focuses on the “we”, “our”, and “us”,
not the “I”, “my”, and “me”
- Service
 - Academia
 - Profession
 - Institution



Why Should We Care?

Funding Agencies

- NSF makes an investment each time it funds a grant
 - Make it easy for NSF to justify this investment
 - Make it easy for NSF to procure additional funds for future investments



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NSF Announcement (11/12/2014)



“Every NSF grant has the potential to not only advance knowledge, but benefit society -- what we call *broader impacts*.”

“Broader impacts ensure all NSF-funded science works to better our world.”



NSF Announcement (11/12/2014)

Five Key Contributions of NSF Research

- Building STEM talent
- Innovating for the future
- Improving our society
- Reaching beyond borders
- Engaging a wider audience

The Media

- Always looking for good stories
- If we share it, they will come
- It is not only about ***what*** we share, but
how we share that makes a difference



Relationship Building

- The media likes to work with people who understand their goals and constraints
- Time is of the essence
- The “30 Second” elevator speech



Media Stories

- Aviation Security System Analysis* (2008)
- Pediatric Immunization Analysis* (2002)
- Fuel, Energy, and Obesity (2006)
- NCAA Basketball (March Madness) (2009)
- Cell Phone Safety (2010)
- Election Forecasting (2008)
- Ebola Screening (2014)
- Mass Murder Patterns (2015)

*NSF Funded



Case Study: Aviation Security

Thought it was an interesting problem that would
lend itself to operations research methodologies

Started research in the area in 1994

Published first paper in the area in 1996

Kobza, J.E., Jacobson, S.H., 1996, "Addressing the Dependency
Problem in Access Security System Architecture Design," *Risk
Analysis*, 16(6), 801-812.



From Good to Great Jim Collins

Key Points:

Being No.1 or No. 2

Hedgehog (versus fox) principle

Flywheel

The Flywheel Principle*

Multiple visits to FAA Technical Center and DC

Met key national figures in aviation security

Published several papers on the topic

Had NSF proposals on the topic *rejected*

Awarded small contract from FAA in 1999



* *From Good to Great* (Jim Collins)

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The Flywheel Principle

Then.... September 11th happened.....



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Impact Milestones

Awarded NSF grant (on 1 September 2001)

Became a known entity within the TSA (2001)

Quoted in Congressional briefing (2001)

Briefed the Office of Science and Technology, in the
Executive Office of (former) President George W.
Bush (2002)

Served on TSA internal review panels (2004, 2007)



Academic Output

Published 30 research papers, 2 book chapters

Directed three Ph.D. dissertations, three M.S. theses

Co-editing special issue of *IIE Transactions* (Homeland Security) (2005-2006)

Contributed problem to the *Consortium for Mathematics and Its Applications* UG modeling competition (2002)

Produced video “Aviation Security: Researching the Risk” (2006)

Awarded NSF grant (1 August 2009)



Outreach

Professional magazines, letters to the editor, op-eds

McLay, L.A., Jacobson, S.H., Kobza, J.E., 2005, "Making Skies Safer: Applying Operations Research to Aviation Passenger Prescreening Systems," *ORMS Today*, 32(5), 24-31 (Reprinted in *Analytics*, Spring 2008, 13-17).

Jacobson, S.H., Lee, A.J., 2010, Aviation Security in 2030: A Glimpse into the Future," *ORMS Today*, 37(6), 14,16.

Jacobson, S.H., 2011, "Letters: TSA chats address limits of technology," *USA Today*, 30(36), 3 November 2011, 8a.

Jacobson, S. H., 2012, "The I's of Aviation Security," *Journal of Transportation Security*, 5(1), 35-38.



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Outreach

Newspapers, Websites, Press Releases

(8 May 2012) Quoted in the Reuters news stories, “[U.S. airport security could detect Al Qaeda device: officials](#)” and “[Would-be suicide bomber was U.S. informant](#)”. Over 5200 national and international media outlet reported the story.

(April 1, 2012) Quoted in the news article, “Republicans take aim at TSA, agency is inefficient, too expensive,” published in the [Daily News Journal](#) (Nashville, TN).

(January 31, 2012) (University of Illinois, National Science Foundation) Press Release: [Risk-based Passenger Screening Could Make Air Travel Safer](#).

November 18, 2011: KCCI-TV (CBS affiliate, Des Moines, IA) news special report [Airport Insecurity, Part II](#) features aviation security expert Sheldon H. Jacobson.

September 8, 2011: Press Release (11-184) issued by the National Science Foundation: [From 9/11 to Now: Lessons from the Tragedy](#). See also [Sept. 11: A decade later, how secure are we?](#)

(January 4, 2010) Provided commentary featured in “[Will Profiling Make a Difference?](#)” on the *New York Times* web site: Room for Debate. Other references on this topic can be found at [Media Matters for America](#) and the [Keene Sentinel](#).



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Avenues of Communication

- Videos

Aviation Security



Released 20 September 2006

Pediatric Immunization



Released 24 April 2006



Avenues of Communication

- Web Sites

March Madness



bracketodds.cs.illinois.edu

Election Prediction



electionanalytics.cs.illinois.edu

- Blogs

Punk Rock Operations Research

Laura McLay, '06, Associate Professor, UWisc



Recent Activity: Ebola Screening

Timeline

- Contacted (via email) by Patrick Tucker (*The National Journal*) to discuss Ebola screening at airports and its relationship to security screening (late-July 2014)
- Article appeared 1 August 2014

Recent Activity: Ebola Screening

30 September 2014

Thomas Eric Duncan becomes the first diagnosed case of Ebola in the United States

Question asked: How can we stop Ebola from entering the United States?



Recent Activity: Ebola Screening

Washington Post extends an invitation to write an Op-Ed on the relationship between aviation security screening and Ebola screening at airports

- 1 October 2014: Requested early afternoon, wanted Op-Ed by early next day (sent early that evening).
- 2 October 2014: Appeared on web site (went through two iterations with the editor, needed to file a freelance agreement)



Recent Activity: Ebola Screening

3 October 2014: Contacted by Associated Press

- Spoke on the phone with him (David Koenig) (he emailed, I emailed him my phone number and made myself available immediately, he called within the hour)
- 4 October 2014: AP report released
- Picked up by thousands of newspapers

Airports, airlines and Ebola: 5 things to know



Recent Activity: Ebola Screening

4 October 2014: Contacted by NBC New York

- Responded immediately.
- Arranged for MSNBC interview on “Weekends with Alex Witt “ on 5 October, 1210PM ET

7 October 2014: Mentioned in Chicago Tribune commentary

A Manhattan Project against Ebola



Activity: Ebola Screening

Contacted by local and national media sources

- WAND-TV (NBC, Decatur, IL), 5 October 2014
- CBC Radio Canada “[The Current](#)”, 6 October 2014
- [HuffPost Live](#), 6, 9, 14, 17 October 2014
- WTOP CBS Radio 103.5, Washington DC, 6 October 2014
- [WCIA-TV](#) (CBS Champaign, IL) 6 October 2014
- [CBC TV News](#), Toronto, Canada, 11 October 2014



Observations and Experience

- Nothing is “off the record”
- “No comment” cannot be your comment
- “I will get back with you” is too late
- Response time is critical
- You will be misquoted
- You will be asked unexpected questions



Observations and Experience

- 10 minutes of filming translates into one minute of the story
- 10 minutes of questions translates into one or two quotes in an article
- “The interview” before the interview



Key Points

- Impact (not models or algorithms)
- New or unexpected insights
- Short and simple
- Speak slowly
- Answer questions in a way that gets **your** information communicated



Key Principles*

- Honesty
- Humility
- Accessibility
- Accountability



* *New York Yankees Guide for Players*

What Can You Do?

- Get to know the UI News Bureau
 - Steve Witmer (Director)
 - **Liz Ahlberg (Engineering, Physical Sciences)**
 - L. Brian Stauffer (Photography)
- Know yourself (what am I a national expert on?)
- When you publish a paper that has media potential, contact Liz
 - Give her the 30 second elevator speech



Take Home Points

- You can become a (the?) national thought leader in an area
- Service to the profession, the university, the nation, the world
- Visibility creates opportunities



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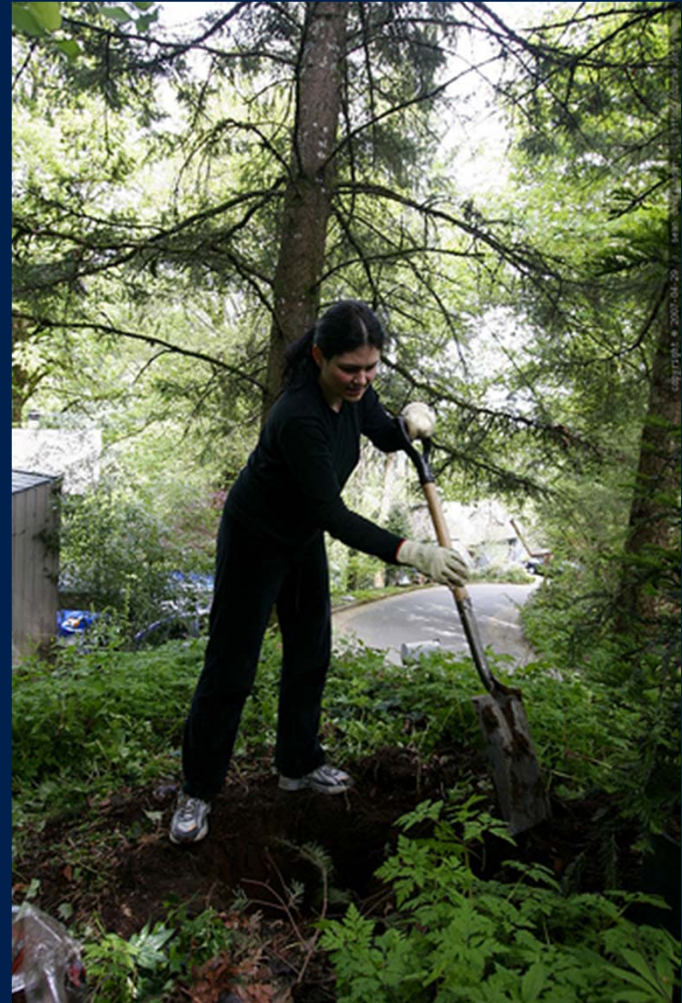
*The best time to plant a tree
was 20 years ago. The
second best time is now.*

-- CHINESE PROVERB

Begin to build relationships
with the people who are in a
position to advance our field.

Help them help you

-- Jerry Maguire



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