

Laura Brown
CSPI PSA: Antibiotic Overuse in Animal Agriculture
Sandy Cannon-Brown, Film and Media Arts, School of Communication
University Honors
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Abstract

This motion-graphics PSA, produced for distribution by the organization Center for Science in the Public Interest, communicates the problem of excessive antibiotics use in animal agriculture. The roughly two-minute story focuses on two characters—an individual with a case of multi-drug-resistant food poisoning and a chicken being fed antibiotics. Through graphics and voice-over, the PSA describes how irresponsible use of antibiotics contributes to antibiotic resistance. In the end, the PSA encourages consumers to choose, and request from retailers, meat raised without the unnecessary administration of antibiotics. The creation of the PSA began with research, guided by CSPI's Food Safety expert, and close communication with the client, CSPI, to write a treatment that accurately and concisely communicates the facts. Next, production involved drafting graphics in Adobe Illustrator, animation of the PSA in Adobe AfterEffects, recording a voice-over, choosing music to accompany the animation, and consulting with film and motion graphics professionals to hone the final piece. The PSA will be distributed online by CSPI through social media and to its 100,000 newsletter subscribers, exposing the specifics of the problem to health-conscious consumers. Beyond contributing to CSPI's campaigns for consumer safety and health, producing this motion-graphics piece provided the opportunity for experience in professional non-profit media. Ultimately, this project undertook the challenges of communicating a complex human health issue, working with a client to produce a professional piece, and mastering animation techniques.

CSPI PSA: Antibiotic Overuse in Animal Agriculture
Proposal

Laura Brown
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SOC Film & Media Arts, CAS Psychology
Class of 2013

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Creative

Concept: This motion-graphics PSA, produced for distribution by the organization Center for Science in the Public Interest, communicates the problem of overuse of antibiotics in animal agriculture. It tells the story, from a sick individual back to the farm, of how irresponsible use of antibiotics in animal feed contributes to antibiotic resistance, and encourages consumers to choose responsibly raised products.

Treatment:

The PSA begins by juxtaposing its two characters: Jane and a chicken. The voice-over explains that Jane is sick, but cannot use antibiotics to get better, while the healthy chicken is being fed antibiotics. The next scene shows the chicken eating antibiotic-supplemented feed. Next, the voice-over explains how preventative and growth-promoting antibiotics create multi-drug-resistant bacteria, specifically *Salmonella*, which then infects 44% of poultry products sold in the U.S. Images on screen complement the voice-over and illustrate the story.

The PSA explains how infected poultry led to Jane's case of food poisoning, and demonstrates the overuse of antibiotics in animal agriculture, at 74% of all antibiotics sold in the U.S. While farmers benefit economically from using antibiotics to grow meat faster and prevent disease, consumers do not save much from this practice. Additionally, as the PSA demonstrates, restricting antibiotics for farm animals would have little effect on meat prices.

Finally, the PSA makes its final point: We don't need to overuse antibiotics to produce affordable meat. The piece encourages consumers to look and ask for meat labeled with USDA Organic and No Antibiotics Administered, accompanied by a USDA Processed Verified Shield.

Technical

Antibiotic resistance poses a major health threat in the United States. Animal agriculture contributes enormously to antibiotic resistance, with farm operators using 74% of all antibiotics administered in the US, often without the need for veterinary oversight or a prescription.¹ Animal agriculture operations use antibiotics in feed for two reasons—to promote growth and to compensate for raising animals in unhealthy conditions. This use, while making production cheaper, creates a perfect environment for antibiotic-resistant bacteria to develop.

Unfortunately, meat is one primary route through which antibiotic-resistant bacteria infects humans. Forty-eight million people in the U.S. get food poisoning each year, with 128,000 hospitalizations and 3,000 deaths as a result.² *Salmonella* and *campylobacter* infections are those most commonly linked to agriculture, with *campylobacter* infecting up to two million Americans per year.³ Certain cases of food poisoning are so severe that they require treatment, but 18% of *campylobacter* bacterial infections are resistant to choice antibiotics.³ Cases of food poisoning occur in non-meat food items as well, including sprouts, peanut butter, and spinach. Antibiotic-resistant bacteria from agricultural operations also endanger humans and the environment through the two trillion pounds of animal waste produced each year in the U.S., as bacteria travel through water, irrigation, and even the air.³

The motion-graphics PSA explains the problem of irresponsible antibiotic use in animal agriculture by telling a story that traces the source of antibiotic-resistant bacteria in food poisoning. Although the statistics presented are crucial, the take-home message asks consumers to inquire about how antibiotic use in the production of the food that they purchase. The end of the PSA identifies which labels consumers can look for in seeking out responsibly raised meat.

The PSA uses simplistic graphics alongside bold text emphasizing numbers. A warm color palette, coupled with a newsprint-textured background, creates familiar imagery for the audience. Additionally, the professionally produced voice-over, commissioned for this piece, grants the PSA professionalism and legitimacy. Although the voice-over tells the whole story, the graphics and text stand alone to represent the process between antibiotic overuse and infection. Background music accompanies the piece.

Primarily, production of this PSA concerns communicating the correct and most impactful facts to consumers. Research, conducted with CSPI's Antibiotics expert, Susan Vaughn Grooters, guides the treatment. Careful development of the treatment, and feedback from CSPI's Communications team, including Jeff Cronin and Clare Politano, leads the selection of facts included in the PSA.

Challenges include producing professional graphics for distribution by an impactful organization, and communicating how consumers can have an impact on the issue. Mentorship from Susan Vaughn Grooters at CSPI and Matt Nagy, a motion-graphics and editing specialist, help to approach these challenges.

¹ DeWaal, C. S., Roberts, C. & Catella, C. (2011). Antibiotic resistance in foodborne pathogens: Evidence of the need for a risk management strategy. *CSPI White Paper*. Center for Science in the Public Interest.

² Meat on drugs. (2012). *Consumer Reports*.

³ Antibiotic resistance – An emerging public health crisis. *The Campaign to End Antibiotic Overuse*. Keep Antibiotics Working.

Funding/Marketing/Distribution

This is a low-budget project funded by a grant from the American University Honors Program of up to \$300. The grant is intended for music, image royalties, and other technical media needs. The cost of the professional voice over, at \$100, is covered by CSPI's funds.

The primary audience for the PSA is the decision-makers of households that consume meat products, namely, mothers. Middle- to upper-income individuals who may already have an investment in the health impact of their food purchases will likely respond most strongly to the PSA's message. However, the PSA also targets those individuals beginning to make their own purchasing decisions and developing consumer power—politically aware students. Distribution through online media helps to target this younger demographic.

CSPI is responsible for distribution of the PSA, primarily through their website, but also through other channels, including social media, the Keep Antibiotics Working coalition, and to their 100,000 newsletter subscribers.

Key Personnel and Advisers**Laura Brown****EDUCATION****American University**, Washington, D.C.

School of Communication: Film and Media Arts

May 2013

College of Arts and Sciences: Psychology

Average GPA: 3.97/4.0

HONORS AND AWARDS**Dean's List**, American University School of Communication

2009-2012

Honors Program, American University

August 2010-May 2013

EXPERIENCE**PBS Affiliate KCTS9**, Seattle, WA**Marketplace Research Contract Employee**

May 2012-August 2012

- Prepared reports on factual television marketplace trends for use in content development decisions.
- Worked in Excel and with the Graphics department to create a database of primetime factual television for poster display and content development planning.
- Contacted networks and created a list of commissioning executives and contact information.
- Worked with a station editor on an Avid training exercise in motion graphics.

Content & Production Intern

June 2011-August 2011

- Compiled research and reviewed independent submissions for production.
- Assisted in creation and upkeep of a database of future and current program development.
- Shadowed station editors to learn the basics of the Avid editing system.

Random Original Productions, Everett, WA

May 2011-August 2011

Production Intern & Account Assistant

- Initiated and maintained communication with local companies about appearances on a business talk show.
- Assisted in production tasks for the talk show.

Special Broadcast, American University's ATV**Graphics Lead**

August 2012-December 2012

- Adapt an AfterEffects template to create animated opening and closing sequences.
- Respond to correspondent's requests to output lower and upper thirds for use in broadcast packages.

Floor Director

August 2010-Present

- Set up and manage filming of interviews with select American University guest speakers.

ATV News, American University's ATV**White House Press Corps, Camera Operator, Editor**

August 2012-Present

- Attend scheduled White House press briefings to create packages for broadcast.

Editor

August 2011-December 2011

Assistant Editor

August 2010-May 2011

- Work on Final Cut Pro 7 to prepare news packages with audio and color correction, apply graphics and lower thirds, and cut the final show for final broadcast and web.

Floor Director

August 2010-December 2011

- Communicate from control room to studio during production of a 30-minute news show.
- Ensure that all technical aspects of live production are operating smoothly.

Tech Crew, American University's ATV News

September 2009-December 2011

SPECIAL SKILLS

Strong capabilities with Adobe PhotoShop and AfterEffects; Microsoft Excel, Publisher, Word, and PowerPoint. Experienced with Final Cut Pro 7, Adobe Premiere, HTML, CSS, and Flash with ActionScript3.

Key Advisers

CSPI

Jeff Cronin

Communications Director

Jeff Cronin is Director of Communications for CSPI. He is responsible for maintaining CSPI's high profile in the news media, for its web site, and for publicizing the group's reports, studies, and *Nutrition Action Healthletter*. Prior to joining CSPI in 2002, Cronin served as Press Secretary for Common Cause, the nonprofit government watchdog group. Before coming to Common Cause in 1995, Cronin worked in nonprofit fundraising and on a number of political campaigns at the presidential, congressional and state legislative levels. He received his degree from the University of Massachusetts at Amherst.⁴

Susan Vaughn Grooters

Research and Policy Associate, Food Safety

Susan's role at CSPI involves communicating and representing CSPI's standpoints on food safety improvement. She has worked as Director of Research and Education for STOP Foodborne Illness. Susan received her PhD in Environmental and Occupational Health from the George Washington School of Medicine and Health Sciences in 2013.⁵

Clare Politano

Communications Coordinator

Clare graduated from the University in Virginia with a BA in Foreign Affairs in 2009. Since then, she has worked for the International Rescue Committee, Rivanna Natural Designs, and joined CSPI in 2011. Her role as Communications Coordinator involves managing CSPI's web and social media presence.⁵

American University

Sandy Cannon-Brown

Adjunct Professional Lecturer, School of Communication

Associate Director, Center for Environmental Filmmaking

Sandy Cannon-Brown is an adjunct professor of Film and Media Arts. She received AU's Award for Outstanding Teaching in an Adjunct Position in 2011. Presently she is teaching Advanced Visual Media Portfolio, acting as the executive producer for independent student projects. Each fall, she teaches Environmental and Wildlife Production, a course in which students produce documentaries that air on Maryland Public Television (MPT) during Chesapeake Bay Week. The partnership with MPT developed through the Center for Environmental Filmmaking, where Cannon-Brown is an Associate Director. The films for MPT have won many prestigious awards, including numerous student Emmys. Cannon-Brown also is president and founder of VideoTakes, Inc., and an award-winning writer, producer, and director of programs that educate,

⁴ Text from <http://cspinet.org>

⁵ Text modified from LinkedIn profile: <http://linkedin.com>

inspire and enlighten. Her peers in the International Television Association (ITVA) honored her with Special Achievement Awards for Directing non-professional talent, Script Writing and Directing. Women in Film & Video honored her with its highest honor, the Woman of Vision award, for a career that successfully combines the spirits of public service, journalistic integrity and artistic expression.⁶

Motion Graphics

Matt Nagy

Senior Specialist, Video Production, American College of Cardiology
Originally from Pennsylvania, I graduated from Susquehanna University with a B.S. in Computer Science in 2004 and moved to the Washington, DC metro area shortly thereafter to pursue film and media. I completed my M.A. in Film & Video at American University in 2007. My thesis film, *The Bronze Door*, is an award-winning 20-minute dramatic narrative adapted from a Raymond Chandler short story.

Focusing on post-production at AU, as well as cinematography, I have produced, shot, and edited promotional videos, employee messaging pieces, trailers, podcasts, and short-form projects for private, government, academic and nonprofit clients. Working as a contract Producer for the United States Postal Service headquarters in Washington, DC. I developed and produced several projects, including the USPS Year in Review, a movie-like trailer for the Flats Sequencing System, a promotional spot for the Priority Mail Flat-Rate Box, and the “I” in Shipping internal messaging campaign.

As the Project Director for VideoTakes, Inc. in Arlington, VA, I worked closely with various non-profits to produce, edit, and design graphics for promotional and marketing pieces. Clients included the World Resources Institute, U.S. Fish & Wildlife Service, U.S. Army Reserve, and Nature’s Best Photography.

Currently, I produce, edit, and design content as the Senior Specialist, Video Production at the American College of Cardiology in Washington, DC. In my continued work as a sole proprietor, I have recently completed a number of projects and fostered relationships with the SAIC Integrated Communications, The Media Project and Philosophy IB.⁷

⁶ Text from <http://american.edu>

⁷ Text from <http://matthewsnagy.com>

Budget and Production Schedule

ITEM:	ESTIMATED AMOUNT:
Voice over fee	\$100 – covered by CSPI
Music track	\$46
Image/graphic rights	\$10.20
TOTAL	\$156.20

January 28: Capstone form and grant application submitted

February 1st-March 6th: Development phase

- Work with CSPI to create a treatment, distribution plan, and proposal
- Submit proposal to Sandy Cannon-Brown for approval
- Begin developing graphics
- Draft storyboard for PSA

March 6: Mid-point check-in with Advanced Visual Media Portfolio class, present work so far

March 6th-April 10th: Initial production phase

- Continue to work with CSPI to refine message and look of PSA
- Finish PSA storyboard
- Draft PSA in AfterEffects

Week of April 10th: Present draft to Sandy-Cannon Brown and CSPI

April 10th-May 1st: Finishing production phase

- Refine and complete PSA in AfterEffects
- Work with CSPI to begin implementation of distribution plan

May 1: Final project delivery to advisor, CSPI, Honors Program

Laura Brown
CSPI Antibiotics PSA Treatment

V.O.	On-screen
This is Jane. Jane is sick, but antibiotics won't help her get better.	Icon of person ("Jane") appears, hunched over, dark cloud over head. Pill icon appears, is crossed out. Forehead turns red, sweat beads. Text: Antibiotics
This chicken isn't sick, but is being fed antibiotics.	Icon of chicken pecking at feed appears. Pill drops into feed, chicken continues eating. Text: Antibiotics
	Icon of chicken and Jane move apart in opposite directions, creating a frame like a comic strip. Chicken is in the first panel, Jane in the last panel. No text
This chicken is fed antibiotics so it will grow faster and avoid disease.	Zoom to show first frame, containing chicken. Chicken continues eating, grows fatter. Single pill appears next to its head. Text: growth-promotion, disease prevention
Seems like a good idea...	Bacteria icon heads toward chicken but bounce off pill. No text
But antibiotics are routinely given to farm animals without any sign of illness in the flock.	Other chickens appear in a grid formation, each with a little pill next to it. Text: Antibiotics
Animal agriculture squanders 74% of all medically important antibiotics, often to compensate for unsanitary growing conditions.	Pill next to each chicken multiplies, forming a three-quarters halo of pills. Background of grid turns brown, bacteria multiply and surround. Text: 74% antibiotics used by animal agriculture
This practice creates the perfect environment for antibiotic-resistant bacteria to develop...	Zoom to single chicken's halo of pills. Pills form into a line, facing a line of bacteria. Bacteria attack, pills disappear, some smaller bacteria appear. Larger bacteria grow bolder. Text: Antibiotic-resistant bacteria
And infect entire flocks.	Zoom out to show flock/grid of chicken, bold bacteria lands on each chicken. Text: Antibiotic-resistant bacteria
Up to 44% of retail chicken carries multi-drug-resistant <i>Salmonella</i> .	Bold bacteria icons move to next panel, landing on icon for chicken in a grocery store aisle. Zoom out to show meat section of a grocery store. Sections of poultry types filled to appropriate places (like a bar graph) to show percentages. Text: 44% of chicken carries multi-drug-resistant <i>Salmonella</i>.
So when just a little bit of raw chicken came into contact with Jane's meal, she got a nasty case of food poisoning...	Panel shifts over to the next, carrying with it a packet of chicken, so Jane and package of chicken are now in a kitchen scene. Dark cloud

	appears over her head, she hunches over. No text.
And couldn't be treated with antibiotics.	Jane lifts antibiotic pill, it gets crossed out. She leans over again with bright red forehead. Text: Antibiotics
Overuse of antibiotics increases production and lowers costs for the farmer.	Move back to panel showing flock of chicken. Dollar signs spring from chickens' heads (as in Super Mario). No text.
But hardly saves consumers a thing.	Dollar sign shrinks and down a panel, transformed into a penny. Penny lands in Jane's hand, and she looks down at it sadly. No text.
Restricting antibiotic use for farm animals would raise pork prices only 3 to 5 cents a pound, and the raise in chicken prices would be "negligible."	Penny rolls into another panel, where a pig and chicken munch on feed. Penny bumps into feed tray, antibiotic pill icon in a cross-out circle and text appears on feed tray. Text: Pork ↑3-5¢, Chicken↑\$0.00
We don't need to overuse antibiotics to produce affordable meat.	Chicken and feed move into the next frame, where Jane stands. Frame now resembles original set-up. No text.
Jane needs antibiotics. This healthy chicken doesn't.	Pill rises out of feed, plops into Jane. Dark cloud rises from Jane, she stands up straight and smiles. No text.
Look for these USDA certified labels on meat, and ask your retailer and restaurants to provide meat raised without unnecessary antibiotics.	Labels appear below: USDA Certified Organic No Antibiotics Administered (accompanied by USDA Process Verified Shield)