



EAB

# Telling the Story of Research

Tactics for Communicating the Value of University Research

# Two Billion Dollars Down the Hole (Literally)

## The Revolutionary Physics Facility That Never Was



### The Promise

- Multibillion dollar project to discover "God Particle," the theoretical particle that bestows mass
- Facility would have been 20x more powerful than any previous collider
- Thought to advance U.S. contribution to physics and spin-off groundbreaking medical technologies



### The Facility

- Circular tunnel built deep underground in Waxahachie, TX to house superconducting super collider (SSC)
- Total circumference of 54.1 miles
- Cancelled in 1993 after digging 14.6 miles

### The Budget and Opportunity

**\$2B**

Cost to dig hole

**\$11B**

Total expected cost

**13,000**

Total expected jobs



# Poor Communication the Key to Its Demise

## Timeline of Demise

**1987**

President Reagan approves project and his science advisor tells physicists to "*be greedy*" and "*throw deep*."

**1992**

President Clinton becomes less interested in project as Cold War fades in memory. Naming particle the "*God Particle*" confuses Congress.

**October 1993**

Project officially cancelled, although finally supported by President Clinton.

**1989-1992**

Costs rise and facility put against International Space Station for funding, which captured awe and interest of public. Value of facility not communicated well.

**May 1993**

Congressional hearing held to determine whether to continue. Scientists fail to convince legislators of value. Congress votes to cancel funding.

**2017**

Holes have been filled in or used for drainage. Site bought by chemical company.

## Wasted Costs and Lost Opportunity

**\$2B**

Cost to close

**\$4B**

Total monetary loss

**11,000**

Jobs not created



# Scientists, Congress Not Speaking Same Language

## Let Them Eat Quarks!



### Senator:

"...it's hard for me to justify this expense to my constituents... nobody eats quarks"

### Scientist:

"...actually, Senator... you just ate a billion billion billion quarks this morning..."

## Will I See God?



### Representative 1:

"...[referring to experiments done at facility while talking to a scientist] will this make us find God?"

### Representative 2:

"If this machine does that, I'm going to come around and support it"

### Scientist:

*[Stays silent after previous testimony using term "God Particle"]*

## Health Impacts? Nonsense!



### Representative 3:

"...the [facility being built] has not made any advances in curing cancer; let's establish that point here and now..."

### Scientist:

*[No commentary about future potential role of proton therapy in treating cancer]*

# Critical to University Research, Especially Now



## Making the Case for Contemporary Communication

### Four Key Reasons

#### Attract New Donors

- Need to communicate the value of faculty work to attract funding from non-traditional sources
- New donors care about impact instead of publications

#### Secure NSF and NIH Funding

- With funding thresholds higher and higher, it's important to strengthen "broader impacts" section in proposals
- Crucial to justify needs to further public support of stagnating federal funding

#### Garner Public and Legislative Interest

- Create public support around work and the tax dollars that support it
- In some cases, must preemptively defend faculty work from less than trusting politicians

#### Build Name Recognition

- Create awareness of your university in your city and nationally
- Helps retain top faculty and attract research partners and students



# Public (Dis)Engagement



While Data Vary, It's Clear There is More Work to Do

## Unengaged in Science...

**81%**

Of public cannot name a living scientist

**66%**

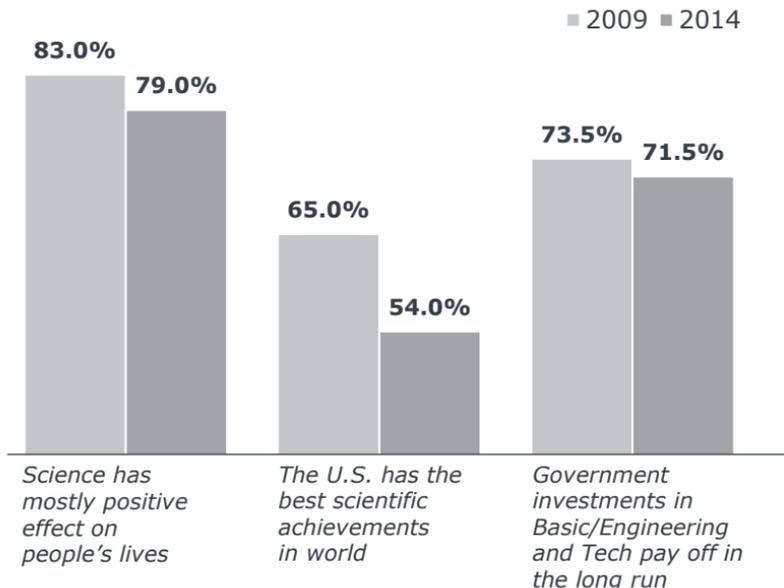
Of public cannot name where science is done

**60%**

Of public do not report having confidence in science

## ...And Signs That Opinions Are Slipping

Public Opinions About Value of Science



# Three Core Imperatives for CROs

## 1 Build Staff Capabilities and Coordination



- Coordinate with communicators across campus
- Invest in communications staff to effectively seek and develop research stories
- Foster relationships between communication staff and faculty

## 2 Cultivate Faculty Engagement



- Engage faculty in value of broad communications
- Train faculty to communicate value of research in plain English, focusing on potential community and societal impact
- Identify and leverage specific faculty for communication leadership

## 3 Optimize Communication Channels



- Build followers and engage the unengaged
- Invest in focused efforts to convey specific messages to specific audiences through the appropriate channel
- Improve research website and social media presence to become more compelling
- Systematically evaluate communication efforts to determine effectiveness



# Building Staff Capabilities and Coordination

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- Tactic #1: Campaign-Based Templates
  - Tactic #2: Purpose-Driven Collaboration Forums
  - Tactic #3: Beat Reporting
  - Tactic #4: Faculty Feedback Protocols

COLUMN

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# Lack of Public Understanding Created Need to Unify

Templated Resources for Dispersed Communicators Maintains Brand

## Public Perception Research Spurs Branding Campaign



45%

Community perception  
of U MN curing  
diseases in 2005



60%

Overall positive  
community perception  
of U MN in 2005



UNIVERSITY OF MINNESOTA

Driven to Discover™



### Case in Brief: University of Minnesota System

- Public Research University with 5 campuses in the Twin Cities, Duluth, Crookston, Morris, and Rochester, Minnesota
- \$880M+ in research expenditures at the Twin Cities campus in FY2015
- Launched “Driven to Discover” campaign in 2006 to build brand reputation of university
- “Driven to Discover” campaign has been embraced and adopted system-wide over the past decade
- Needed to first ensure consistent branding across all university communication output
- Provided all campus communicators with branded templates to produce their own communication materials

# Using the Campaign to Tell a Research Story

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UNIVERSITY OF MINNESOTA  
Driven to Discover™



## Three Core Components Included in Templates



### Make a Compelling Statement

#### "I am Driven..." Statement

"I am driven to create localized painkillers that won't reach the brain."

– Carolyn Fairbanks



### Relay the Impact in Plain English

#### Short Format

We seek to shield the brain from analgesic drugs and pain signals.

#### Medium Format

We research ways to keep both pain signals and potentially addictive painkilling drugs from the brain. Gene therapy is among the promising approaches.

#### Long Format

We research ways to keep both pain signals and potentially addictive painkilling drugs from the brain. We have found drugs that work in the spinal cord and peripheral areas. We are also pursuing a gene therapy approach that would erect biochemical "stop signs" for pain signals en route to the brain.

### Share on Social Media In Consistent Way

#### Tweet

@UMN-Pharmacy Prof Carolyn Fairbanks is #UMNdriven to #endaddiction by creating localized #painkillers that never reach the brain.

#### Facebook Post

Creating localized painkillers that won't reach the brain.

University of Minnesota professor Carolyn Fairbanks is determined to end addiction by keeping both pain impulses and potentially addictive painkilling drugs away from the brain.

Example Content

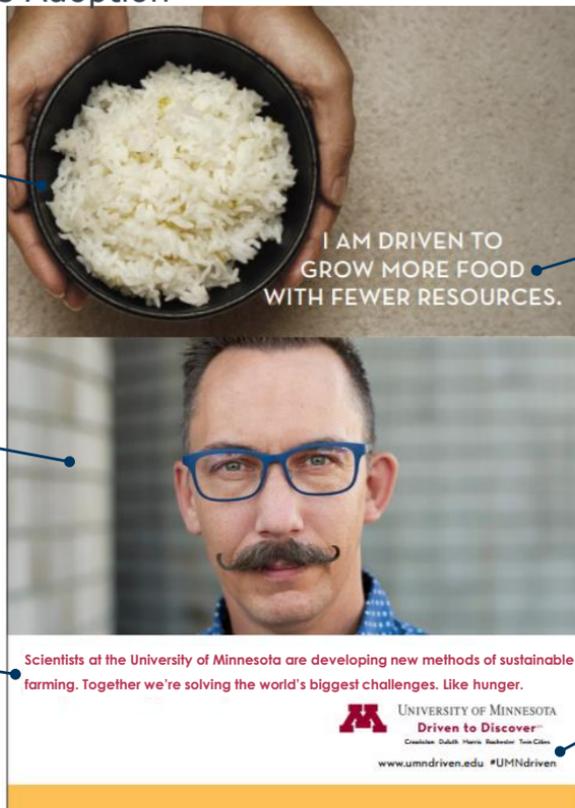
# A Plug and Play One-Page Resource

## Ease of Use Fosters Adoption

Use one of several category images for your field

Use a photo of the researcher that is modern or candid instead of a typical headshot

Use a medium length impact description



I AM DRIVEN TO GROW MORE FOOD WITH FEWER RESOURCES.

Scientists at the University of Minnesota are developing new methods of sustainable farming. Together we're solving the world's biggest challenges. Like hunger.

**UNIVERSITY OF MINNESOTA**  
**Driven to Discover™**  
Cranfield, Duluth, Morris, Rochester, Twin Cities  
www.umndriven.edu #UMNdriven



Plug in "I am driven..." statement

Drop in the appropriate URL and hashtag

# True Collaboration Hard to Come By

Just Getting in the Same Room Not Sufficient

## Varying Levels of Interaction Among Research, Department, and Central Communicators



*No Interaction or  
Collaboration*

- Communications staff across campus don't know who the other communicators are
- Collaboration solely relies on individuals reaching out to other communications staff one-off, with irregular frequency



*Electronic  
Collaboration*

- Collaboration is enabled (through internal newsletters or online announcements), but not necessarily encouraged
- Campus communication remains predominantly siloed



*Infrequent,  
Low-Value  
Meetings*

- Departments that are already linked (by grand challenges or interdisciplinary work) meet regularly on shared initiatives
- Additional shared meetings poorly attended, don't lead to collaboration



*Regular, Truly  
Collaborative  
Meetings*

- Campus communicators develop mutual rapport
- Staff share news and identify opportunities to optimize their communication efforts through shared learning, resource creation, and joint media efforts

# Creating a Central “Council” for Collaboration



**I ILLINOIS**

**Lots of Research Communicators,  
Little Collaboration**



**Research Communications Council  
(RCC)**



- All research communicators across campus (including college-level and central office)
- Approximately 35 members
- Meets on monthly basis

## **Case in Brief: University of Illinois at Urbana-Champaign**



- Public Research University located in Champaign, Illinois
- University Doctoral Universities: Highest Research Activity
- \$630M+ in research expenditures in FY2015
- As a strong interdisciplinary university, needed to facilitate effective collaboration across communications staff
- Organized the “Research Communications Council,” a monthly cross-campus communications staff meeting series using professional development opportunities as a means of educating staff and promoting collaboration

# Creating the Culture was Critical for Collaboration

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## VCR<sup>1</sup> Buy-In Fostered Broader Support for Research Communications Council



### Funding the Effort

- Director of Research Communications appealed to the VCR for the creation of a collaborative group meeting
- Early VCR support was critical for getting the Council off the ground
- VCR provided dedicated budget to fund meeting lunches



### Showing Up

- VCR signals value by attending monthly meetings of the RCC and speaking with communications staff in-person
- VCR looks to the RCC to inform strategic decision making



### Talking it Up Across Campus

- VCR references and credits the RCC when speaking with deans, faculty, and other administrators
- VCR leverages RCC expertise when making recommendations



“The bigger picture is the spirit in which we’re collaborating; seeking ways to enrich the **intellectual vibrancy** and making sure we’re **supporting the true research mission** of the university. As communicators we need to reflect the reality of Illinois, which is a **highly interdisciplinary, highly collaborative** place.”

*Melissa Edwards, Director of Research Communications  
University of Illinois, Urbana-Champaign*

1) Vice Chancellor for Research.

# Professional Development as the Jumping Off Point

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Valuable Information Even Better Than a Free Lunch

**I** ILLINOIS



## High Profile Speaker Ensures Attendance



## General Research Office & Department Updates Keep Staff Informed



## Collaboration Planning Sets Up Opportunities

*Approx. 30 Minutes*

- Presentation relevant to communications activities, time for Q & A included
- Popular Guests Include:
  - Vice Chancellor of Research
  - Director of Research Compliance
  - Director of Government Relations

*Approx. 30 Minutes*

- Updates from the research office
- Department communications staff share research stories they have in the queue

- Identify similar stories or releases that can be linked
- In the moment, schedule follow-up time to collaborate



# Cultivating Faculty Engagement

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- Tactic #5: Faculty Media Spotlight
  - Tactic #6: Immersive Training
  - Tactic #7: Faculty Leader Fellowship

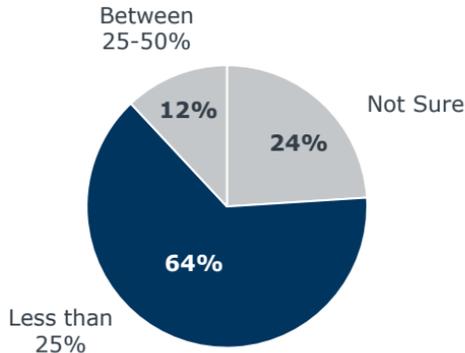
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# Your Most Valuable Communications Asset

## Faculty an Underutilized Fleet of Research Ambassadors

### What Percentage of Research-Active Faculty at Your Institution Speak Regularly with the Media?<sup>1</sup>



80%

Of communications survey respondents would like their institutions to provide formal training to faculty to better communicate their research when approached by the media

### The Potential Benefits of Utilizing Faculty for Research Communications



Messaging is most powerful when delivered by the researcher who made the discovery



The more researchers can talk with the media, the further the reach of the university brand



Many researchers are going to use social media to talk about their work anyway, but communications training can help to send the right message

1) Regularly defined as twice a year or more.



# The Superstars of Research Communications

## Leveraging Skilled Faculty Communicators to Train Others

### The Engaged and Skilled

- Refresh on basic training
- Cultivate skills
- Use as champions to engage other faculty

### Limited Faculty Communication



11%

Percent of research active faculty engaged in communicating broad impact of research



### Bringing the Most Funding to Campus

The top 10 funded researchers on campus are among this subset of regular communicators

### Case in Brief: University of Denver

- Private Research University located in Denver, Colorado
- University Doctoral Universities: Higher Research Activity
- \$16M+ in research expenditures in FY2015
- Wanted to identify the best candidates for more intensive communications training
- Developed proposal for Public Impact Fellows Program, an exclusive faculty communications training program led by top communicators and communications experts



# Expanding on the Communications Basics

## Details of Advanced Training at DU



### The Public Impact Fellows Program



#### Two-Way Selection Process

- Faculty must apply
- Leaders choose participants based on research areas and communication potential



#### Peer and Expert Facilitation

- Training delivered from successful, top DU communicators and outside communications experts



#### Monthly Discussion-Based Cohort Meetings

- Fellows share their experiences as they learn and practice their communications strategies



#### Biennial Campus-Wide Workshops

- Fellows present their experiences and skill development to the larger faculty community and encourage future fellowship participation

### Fellowship Objectives

- ✓ Identify disciplinary differences in effective modalities
- ✓ Help faculty determine their preferred communication outlets
- ✓ Find the metrics that communicate the value of unique research areas



# Optimizing Communications Channels

- Tactic #8: Targeted Campaigns
- Tactic #9: Website Enhancement Audit
- Tactic #10: Social Media Improvement Guide
- Tactic #11: Compelling Content Library
- Tactic #12: Community-Connected Events
- Tactic #13: Strategic Scorecard

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# Missing a Golden Opportunity

## Websites as Gateways to the Research Enterprise

### The Potential Benefits of Your Website

#### Accessible

Anyone can access 365/24/7 - People often visit websites as soon as they have a question or want information

#### Range of Audiences

Websites attract diverse array of stakeholders, including faculty, prospective students, businesses, and funding agencies

#### Easy to Update

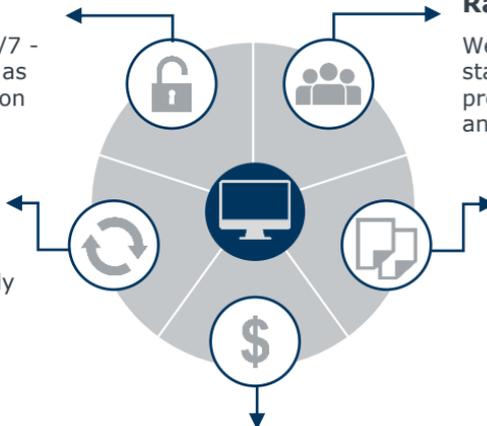
Institutions can modify and add content quickly and easily

#### Information Repository

Universities can store extensive information and resources in a single central location

#### Cost Efficient

Updating and maintaining a website can save universities money on print materials



“The website is really the centerpiece of the communications strategy and platform...getting it right is crucial in establishing the profile and impression that you need to convey.”

*AJ Cheline, Director of Marketing and Communications  
Office of Research, UC Davis*



# Sizing Up the Current Landscape

## Audit Reveals Opportunities for Improvement Across All Institutions

### Key Website Audit Findings

0

Not a single institution had a research website with all 14 features

~5 of 14

Average number of most valuable research website features for an institution was 5.48

<50%

Less than half of the institutions had at least **11 of the 14** features



Institutions with higher research expenditures had stronger research websites<sup>1</sup>

### URF Website Audit-in-Brief



- Audited 50 randomly-selected research universities
  - 25 with research expenditures exceeding \$100M
  - 25 with research expenditures between \$10 and \$99M
- Developed a list of 14 most valuable research website features based on website usability principles and an examination of best-in-class research websites
- In most cases, features had to exist within three clicks from research homepage to count



### How Does Your Institution Stack Up?

Download the Research Website Self-Audit Today

[www.eab.com/urf/researchcommunications](http://www.eab.com/urf/researchcommunications)

1) T-test ( $p < 0.05$ ) showed statistically significant difference in the number of website features between institutions with higher (>\$100M) and lower (\$10-99M) research expenditures.

# Pinpointing the Critical Deficits

## Four Key Areas Where Websites Are Often Lacking



### Engaging With Visuals

- Most viewers leave web pages in under 20 seconds
- Viewers are more likely to remain on sites if they are not solely text-based

### Targeting Specific Stakeholders



- Viewers are eager to get to information that relates to them
- Institutions can keep viewers engaged longer if they provide navigational links and tailored information for different stakeholders



### Highlighting Unique Strengths

- Research websites blur together so institutions need to make their sites distinctive
- If institutions stand out in key areas, they should publicize that information

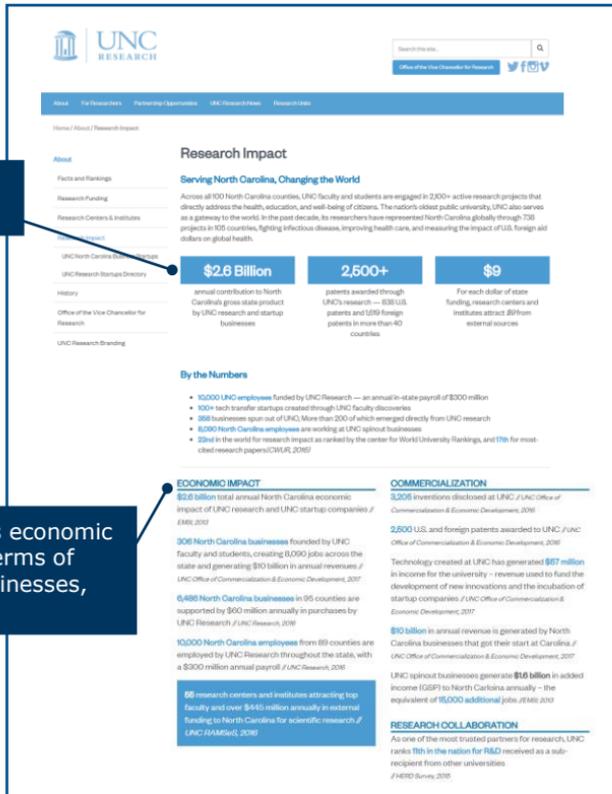
### Including Meaningful Metrics



- Non-academic audiences don't value publications and citations as much as academic audiences
- Potential funders, lawmakers, and the public at-large are more compelled by concrete examples of how research relates to their lives and communities

# Including Meaningful Metrics

## Showing How Research Connects to the Local Community



**UNC RESEARCH**

Home / About / Research Impact

**Research Impact**

**Serving North Carolina, Changing the World**

Across all 100 North Carolina counties, UNC faculty and students are engaged in 2,000+ active research projects that directly address the health, education, and well-being of others. The nation's oldest public university, UNC also serves as a gateway to the world. In the past decades, its researchers have represented North Carolina globally through 730 projects in 100 countries, fighting infectious disease, improving health care, and measuring the impact of U.S. foreign aid on global health.

<b>\$2.6 Billion</b>	<b>2,500+</b>	<b>\$9</b>
annual contribution to North Carolina's gross state product by UNC research and startup businesses	patents awarded through UNC's research — \$38.5U, patents and USIP foreign patents in more than 40 countries	For each dollar of state funding, research centers and institutes attract \$9 from external sources

**By the Numbers**

- 10,000 UNC employees funded by UNC Research — an annual in-state payroll of \$300 million
- 500+ tech transfer startups created through UNC faculty discoveries
- \$8 billion business spin-out of UNC. More than 200 of which emerged directly from UNC research
- 6,850 North Carolina employees are working at UNC spinout businesses
- 5th in the world for research impact as ranked by the center for World University Rankings, and 7th for most cited research papers (CWUR, 2016)

**ECONOMIC IMPACT**

\$2.6 billion total annual North Carolina economic impact of UNC research and UNC startup companies / EAB, 2017

306 North Carolina businesses founded by UNC faculty and students, creating 6,000 jobs across the state and generating \$80 billion in annual revenue / UNC Office of Commercialization & Economic Development, 2017

6,850 North Carolina businesses in 95 counties are supported by \$60 million annually in purchases by UNC Research / UNC Research, 2016

10,000 North Carolina employees from 89 counties are employed by UNC Research throughout the state, with a \$300 million annual payroll / UNC Research, 2016

50 research centers and institutes attracting top faculty and over \$440 million annually in external funding to North Carolina for scientific research / UNC IAA&ICV, 2016

**COMMERCIALIZATION**

\$205 investments disclosed at UNC / UNC Office of Commercialization & Economic Development, 2016

2,600 U.S. and foreign patents awarded to UNC / UNC Office of Commercialization & Economic Development, 2016

Technology created at UNC has generated \$97 million in income for the university — revenue used to fund the development of new innovations and the incubation of startup companies / UNC Office of Commercialization & Economic Development, 2017

\$10 billion in annual revenue is generated by North Carolina businesses that got their start at Carolina / UNC Office of Commercialization & Economic Development, 2017

UNC spinout businesses generate \$1.6 billion in added income (GSP) to North Carolina annually — the equivalent of 35,000 additional jobs / EAB, 2017

**RESEARCH COLLABORATION**

As one of the most trusted partners for research, UNC ranks 11th in the nation for R&D received as a sub-recipients from other universities / J&ED Review, 2015

Key facts and figures

Emphasizes economic impact in terms of dollars, businesses, and jobs



THE UNIVERSITY  
of NORTH CAROLINA  
at CHAPEL HILL

### Projects By County

UNC centers and institutes are conducting over 575 research and service projects in counties across all of North Carolina that help our study communities by:

- Creating jobs for North Carolinians left unemployed after the loss of furniture, manufacturing, and textile jobs.
- Making North Carolina's roads and highways safer.
- Preventing disease in our state.
- Providing quality education to North Carolina's children and adults.
- Helping communities and local government prepare for natural disasters.



Focuses specifically on the impact in North Carolina

# Coupling Pop Culture With Research Expertise

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## Increasing Engagement Through Social Media



**231%** ↑  
Percent increase in website page views

**135K** ↑  
Number of Twitter impressions (increased from 9,885 in previous month)

**3** Number of local news stations that picked up the stories

**1** Number of articles re-written (and infographic picked up) by R&D magazine



## Case in Brief: University of Arizona



- Public Research University in Tucson, Arizona
- Doctoral Universities: Highest Research Activity
- \$600M+ in research expenditures in FY2015
- Sought to utilize digital communications to maximize impact, better engage with stakeholder groups, and elevate overall attention to their research
- “Star Wars Science” featured four stories in which Arizona researchers applied real-world science to the highly popular sci-fi Star Wars movie series
- Timed to precede a new film release, utilized #StarWarsScience, and promoted through Twitter, Facebook, YouTube, and LinkedIn Slide Share

# Making Research Powerful and Pithy

## LSU Uses Fact Sheets to Communicate With Legislators and Community

### Fact Sheet Creation Process



LSU



### Case in Brief: Louisiana State University

- Public Research University in Baton Rouge, Louisiana
- Doctoral Universities: Highest Research Activity
- \$280M+ in research expenditures in FY2015
- Interim Vice Chancellor for Strategic Communications wanted to create fact sheets that could be given to legislators to show how LSU was planning to solve key problems

# Talking in Football Fields

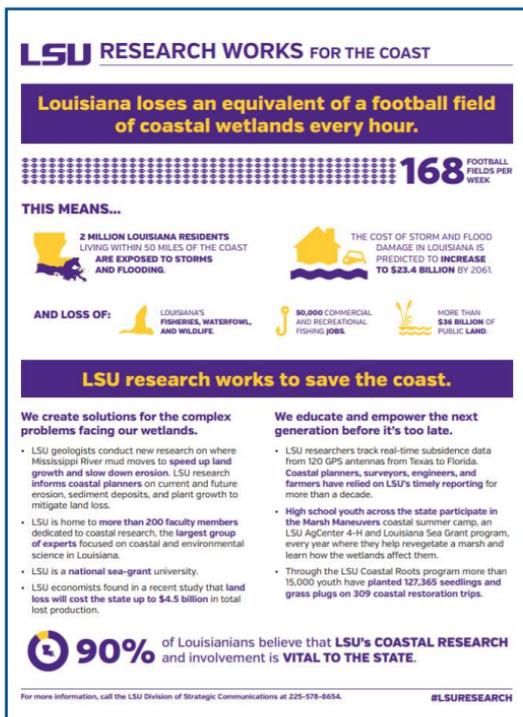
## Creative Design Makes Research Accessible and Meaningful to Audience

Uses relatable metrics (football fields) to show impact

Explains degree of problem and what it means for local community

Overview of how LSU research is tackling the problem

A companion [video](#) was presented on the jumbotron at the first LSU football game of the season, which has an average audience of over 100,000 people, and promoted to over 240,000 followers on LSU social media channels



**LSU**

All fact sheets are available for download on the LSU Research Works [website](#), which got 1,500+ unique views per month when LSU launched and promoted the campaign

Specific statistic stating the degree of public engagement, which is particularly important for a lawmaker audience



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