Helping Faculty Communicate the Value & Impact of Research

Jill Jividen, PhD
Asst. Director for Research Development
U-M Medical School Office of Research
NORDP Great Lakes 2017
COMMUNICATE RESEARCH?

Reasons to communicate value & impact of research

The New Yorker

SATIRE FROM THE BOROWITZ REPORT

SCIENTISTS: EARTH ENDANGERED BY NEW STRAIN OF FACT-RESISTANT HUMANS

By Andy Borowitz  May 12, 2016
Scientists Brace for a Lost Generation in American Research

Private funding isn't enough to offset the president's proposed budget cuts, they say.

ADRIENNE LAFRANCE | MAR 16, 2017 | SCIENCE
Reasons to communicate value & impact of research

• Research is largely taxpayer-funded

• Universities’ public mission
  (faculty should see this as an integral part of their research careers)

• Helping faculty increase competitiveness
Helping faculty increase competitiveness

1. Alternative metrics

2. Name recognition
FACULTY NEED HELP?

Helping faculty communicate
Communications

Whether you’re looking for ways to publish the results of your latest research project, would like assistance with developing a website, or are just looking to spread the word about an upcoming event your lab is hosting, there are a wealth of resources throughout the UMHS and beyond that can help.

For quick access to some of the most frequently requested communications resources, check out the Hot Topics menu on the left.

Common Communications Needs

Have a specific communications need that you would like to address? Visit Common Communications Needs for step-by-step instructions and resources to help you through many of the most common communications scenarios you’re likely to encounter at the U-M.
FACULTY NEED HELP?

Your Audience Has Different Communication Styles

1. Background
2. Supporting Details
3. Results/Conclusions

Researchers

Public

Remember the 3Ms to Construct Your Message

Your message should be:

Miniature
Meaningful
Memorable

Model adapted from the American Association for the Advancement of Science
Helping faculty communicate

Common Communications Needs

- How do we get faculty & students to attend our workshop?
- My lab wants to...create a website/produce a video/increase citations for a recent paper.
- A photographer or video crew wants access to our lab. What do we do?
- Our grant proposal requires a lay summary or public outreach plan...
Communicating Science Seminar Series

1. Public Relations
2. Social Media
3. Scholarly Communication
4. Plain Language
5. Data Visualization
Public Relations and External Audiences

“Only Connect: Reaching New Audiences via Public Relations & External Communications”

Presenter: Kara Gavin, MS
Lead Public Relations Rep
Michigan Medicine Dept. of Communications
Public Relations and External Audiences

Purpose of PR:

• Our work should reach people who care
• Our faculty’s expertise can have impact
• Taxpayers & policymakers need to know what they pay for
• Most Americans need science/medicine translated
• It’s easier than ever to reach broad audiences
Public Relations and External Audiences

**Audience & Science Literacy:**

- About 20% of Americans can explain what it means to study something scientifically
- 53% extremely/very confident: childhood vaccines are safe & effective (30% somewhat confident)
- 31% extremely/very confident: life evolved through natural selection (24% somewhat confident)
- **80% very or moderately interested in scientific discoveries**

AP poll published April 2014; 1,012 adults rated confidence in scientific concept
Communicating Science Seminar Series

Public Relations and External Audiences

Audience & Science Literacy:

- Average U.S. reading level = 8th grade
- 20% of Americans read at 5th grade level or below
  - Includes 40% of seniors and 50% of minority groups

2003 National Assessment of Adult Literacy (NAAL)
Public Relations and External Audiences

Challenges:

• Number who “closely” follow S&T news has declined since 2004
• 50% say that benefits of S&T research outweigh harm
• Policymakers
  o Take aim at “wasteful spending”
  o Seize on controversies & safety lapses
  o Staffers may have little scientific background
“Science literacy for individuals, communities, and societies emerges at the interface of the knowledge, attitudes, and motivation of laypeople and the communicative efforts and trustworthiness of scientists.

“The scientific community needs to take at least partial responsibility for creating an environment in which science literacy can thrive….

“We envision a society that is infused by science literacy...in the sense that there is a shared belief that scientific expertise can be trusted, that scientific misconduct and fraud are rare, and that social organizations can and should be structured to enable science literacy rather than prevent it.”

Public Relations and External Audiences

STEM Workforce v. US Population:

- STEM ~ 5.7M
- Everyone else ~310M

Public Relations and External Audiences

Connect with PR reps:

- Plan best course
  - Writing, visuals, dissemination, timeline, handling controversial issues
- Can connect to media (e.g., expert opinion, press releases)
- Leverage embargo system (for publications)
- Get started online (website, social media, etc.)
Communicating Science Seminar Series

Public Relations and External Audiences

New Era of Communication:

• Traditional news media’s gatekeeper role eroding
• Big institutions = trustworthy news sources, share directly
• Everyone’s a publisher
• Visuals are vital
• Advice: publish institutional content in a way it can be used freely (& cited)
Public Relations and External Audiences

Communicating with the public:

• Avoid jargon
• Speak their language (don’t just hope someone else will do it!)
• “Robust” = an adjective for data? Or coffee?
• Does it pass the Thanksgiving Table Test?
Public Relations and External Audiences

Communicating with the public:

- Logical organization
- "You" and other pronouns
- Active voice
- Common, everyday words
- Short sentences, short paragraphs
- Easy-to-read design features
Public Relations and External Audiences

Communicating with the public:
• Define scientific terms
• Engage audience’s imagination, emotions, senses

Flesch-Kincaid readability test in Word
• File>Options>Proofing>Show Readability Statistics
• If you get a score over 8th grade (without jargon words you can’t avoid), revise!
The Web, Social Media, and Your Research

“The Networked Public Physician: Will You Take the Plunge?”
Presenter: Joyce Lee, MD, MPH
Robert P. Kelch Research Professor of Pediatrics & Communicable Diseases

“Writing for the Web”
Presenter: Kelly Davenport, MFA, MSI
Web Project Manager
Michigan Multimedia
The Web, Social Media, and Your Research

Doctor as Designer
Joyce Lee, MD, MPH, Designer, Researcher, Umich Assoc Prof, Co-conspirator of healthdesignby.us Check out twitter@superuser.com
Ann Arbor, MI
joyceisplayingontheinter.net

Doctor as Designer
Be nice, be conversational, don’t be mean, and don’t talk about yourself all the time.
Just like in real life. #rwjfcsp2014 #hcsm
9:16 PM - 2 Nov 2014

Doctor as Designer
Don't give up before you start. Be patient. Drop in, drop out, drop in. Follow interesting people and listen. #rwjfcsp2014 #hcsm
The Web, Social Media, and Your Research

Twitter & other online communities:

- As microblogging platform, place for conversation
- Descriptive, specific hashtags
- Value to science, new discovery
- Patient communities; getting patient perspective, empathy
- Elevator rule
- No-no’s
  - Facebook photo op with placenta
  - Nurse fired for Instagram shot
The Web, Social Media, and Your Research

Social Media Explained

Twitter: I'm eating a #donut
Facebook: I like donuts
Foursquare: This is where I eat donuts
Instagram: Here's a vintage photo of my donut
YouTube: Here I am eating a donut
LinkedIn: My skills include donut eating
Pinterest: Here's a donut recipe
LastFM: Now listening to "Donuts"

G+: I'm a Google employee who eats donuts.
The Web, Social Media, and Your Research

Writing for the Web:

- User/reader habits for consuming info
- Reader friendly techniques
  - Direct, concise
  - Active voice
  - Structure for intent
  - Avoid acronyms/jargon
  - Any reading level
The Web, Social Media, and Your Research Writing for the Web:

Compare & Contrast

Naturalization: What to Expect

Naturalization is a way for a person to become a U.S. citizen. Below is a general overview of what to expect during the naturalization process. To learn more, read the Guide to Naturalization.

Complete your application. You have decided to apply for U.S. citizenship. Here is what to do next: Review the application instructions. Download the naturalization application. Get two passport-style photos taken. Collect all the documents and evidence you will need to complete your application. Fill out your application.

Review your work and correct any mistakes. Submit your application, two photos, documents and evidence, and the required fees. Find out where to file your application. Make sure to keep your address current with USCIS.

Appear for your biometrics appointment. After we accept your application, we will notify you if we need to take your biometrics: fingerprints, photo, and signature. We will send you an appointment notice if we need biometrics.

The notice will provide you the date, time, and location of the appointment. Appear at the location at the scheduled date and time on the appointment notice.
Scholarly Communication & Dissemination

“Scholarly Communications”

Presenters: Jean Song, MSI, Asst. Director Taubman Health Sciences Library
Molly Kleinman, MSI, Project Manager Health Information Technology Services

• Data Management: Preservation & sharing, Retention & clinical data
• Public & Open Access, Publishing
• Measuring Impact: de-identifying w/ ORCiD, Metrics
Plain Language

“Don’t Blind Them with Science! How to Write in Plain Language”

Presenter: Jill Jividen, PhD
w/ special guest Beth LaPensee, PhD
Plain Language

- What? Why? When?
- Principles of Plain Language
- Logical organization, active voice, common words, format
- U-M Library [Plain Language Medical Dictionary](#)
- Strategies:
  - Simplifying language, using analogies, avoiding clichés
  - Testing it out

- 3 small-group workshops (8-10), discussing examples, writing exercises
Communicating Science Seminar Series

Data Visualization

“Introduction to Data Visualization”

Presenters:  Marci Brandenburg, MS, MSI
            Taubman Health Sciences Library
Justin Joque, PhD, MSI
            Taubman Health Sciences Library
Eric Maslowski
            Digital Media Commons
Communicating Science Seminar Series

Data Visualization

Overview:
- Visualization Landscape
- Design Principles
- Interpretation
- Campus Resources
Results

Online evaluations:

• 90 unique attendees included faculty, staff (RAs, RD, lab staff), post-docs, students
• 38 completed post-series evaluation
• 80.5% = Very or Somewhat Helpful
• Speakers: 100% Very or Somewhat Engaging
Comments/Suggestions

• “I am new to academia so it was extremely informative” (on Scholarly Dis)
• “More frequent!”
• “I would add a session on science activism, and related ethics, outcomes, and appropriate activities....”
• “I would appreciate more data visualization and communicating scientific information seminars. Maybe something on how to have conversations with people with opposing views in a post-truth world.”
• “Nice overview of the topic and helpful to hear about resources at Umich. More focused seminars on specific areas of data.” (on Data Vis)
• “Speaker were great.” (on Social Media)
Critiques

- “Push the PDFs to attendees instead of making us go get them.”

- “Opportunity for deeper dive beyond intro seminar.... Seminars were interesting but I didn’t walk away feeling like I had any additional tools in my arsenal. Although I did at least have more awareness!”

- “The talk was a good start but not as comprehensive as I expected it to be. The presenters did provide suggestions for additional resources at the end of the talk, which was helpful.” (on Data Vis)

- “The speakers were good, there was far too much information in an hour...having separate sessions that went more in depth or having a longer session would have been helpful.” (on Data Vis)
<Sigh>

• “Personal bias—prefer healthy snacks that keep us awake versus sugary snacks that make us crash quickly. But very nice to have refreshments at all!”

• “Not everyone can eat only cookies.”

• Obligatory date/time/location/parking complaints
For next time:

• Data Visualization could be its own series
• Adding “Visual Abstract” workshop
• Add info re “The Conversation”
• [Michigan Video Abstracts](#)
• Push the PDFs & recordings to attendees
• Maybe more consistent times/locations
• Healthier snacks
Can the study of epigenomics lead to personalized cancer treatment?
Fabián H. F. Répp, University of California, Los Angeles

A field called epigenomics isolates chemical modifications that do not change our DNA sequence but can affect gene activity. What are the limitations, and can health care use this to our advantage?
Writing for The Conversation

What is it?

- Journalistic Staff
- Foundations Universities
- Academics
- Traditional & Social Media
Why The Conversation?

- Broad potential audience
- Major Media outlet republishing
- Help from professional editors
- Attractive pages & imagery
- No paywall, CC licensing
- Cloud-based editing interface
- Trackable metrics
- Credibility of journalistic site
- Optimized for social sharing
- Moderated comments
- CV-enhancing
## Writing for The Conversation

<table>
<thead>
<tr>
<th>What they <strong>DO</strong> want</th>
<th>What they <strong>DON’T</strong> want</th>
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<tr>
<td>- Research-based evidence</td>
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<td>- Around 1000 words</td>
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<td>- Broad audience</td>
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<td>- Informed opinion, commentary or explainers</td>
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<td>- Going beyond your expertise</td>
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<td>- A pre-written piece</td>
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<td>- Political spin</td>
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<td>- Self-promotion</td>
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Publishing Process

- **Idea**: You & colleagues
- **Pitch**: You
- **Refine**: You & section editor
- **Green Light**: Section editor
- **Write**: You & colleagues
- **Edit**: You, colleagues, & section editor via cloud
- **Publish**: The Conversation staff
- **Share**: Everyone!
After You Publish

Embargo (optional)
The Conversation can agree to not publish piece until a set date/time.

Social media
Individuals and institutions share via web and social media

Republishing
The Conversation: 3.7 million users/month
Republishing: 35 million users/month

Timely Topics
Article can be shared again when the topic is timely.
Types of Articles

Timely: Reactive
Timely: Proactive
Timeless

Today
Next Week
Next Month
Next Year
Next Decade

Last Month
Last Week
Today
Next Week
Next Month
Next Year
Next Decade
Types of Articles

Timely: Reactive

Timely: Proactive

Timeless

Commentary, context or relevant information related to a current event
Why public health worries don’t have to ruin your cookie dough

July 14, 2016

136,276 Views

Twitter: 24
Facebook: 432
LinkedIn: 5

Brian Zikmund-Fisher
Associate Professor of Health Behavior and Health Education, Interim Co-Director of the Center for Bioethics and Social Sciences in Medicine, University of Michigan
Types of Articles

Timely:
- Reactive
- Proactive

Timeless

Goal is to push new ideas into the public awareness.

*Journal article just came out, and The Conversation article is released simultaneously for more impact*
Why dementia burden may be less than feared

September 28, 2016 8:51pm EDT

Roger L. Albin
Professor of Neurology, University of Michigan

Kenneth Langa
Professor of Medicine and Health Policy, University of Michigan
Types of Articles

Timely:
Reactive

Timely:
Proactive

Timeless

Commentary and analysis that is always relevant.

Something people will find interesting any day.
Sex and other myths about weight loss
Types of Articles

Timely:
- Reactive
- Proactive

Timeless

A *timeless* piece can become *timely* due to current events
What are septic shock and sepsis? The facts behind these deadly conditions

Hallie Prescott
Assistant Professor in Internal Medicine, University of Michigan

Theodore Iwashyna
Associate Professor, University of Michigan

June 6, 2016

77,000 Views
Resources & References

Communicating Science Seminar Series: PDFs & recorded seminars

- AAAS Center for Public Engagement with Science: [http://www.aaas.org/pes](http://www.aaas.org/pes)
- “For Doctors, Social Media a Tricky Case,” Chelsea Conaboy
- Health News Review Toolkit for Journalists & Consumers
- How to Science: U-M LSA Podcasts
- Joyce Lee’s SlideShare presentations: [https://www.slideshare.net/joyclee/presentations](https://www.slideshare.net/joyclee/presentations)
- Michigan Health Lab blog: [michiganhealthlab.org](http://michiganhealthlab.org) (for research)
- Michigan Health blog: [michiganhealthblog.org](http://michiganhealthblog.org) (for health: lifestyle, wellness & prevention, health management)
- National Science Foundation Science & Engineering Indicators, 2014
- NIH Checklist for Communicating Science & Health Research to the Public
Contact:
Jill Jividen, PhD
Asst. Director for Research Development
734-764-3634
jjgoff@umich.edu

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