



# 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



# COMMUNICATE RESEARCH?

SCRIBE

SCIENTIFIC  
AMERICAN

## Scientists Brace for a Lost Generation in American Research

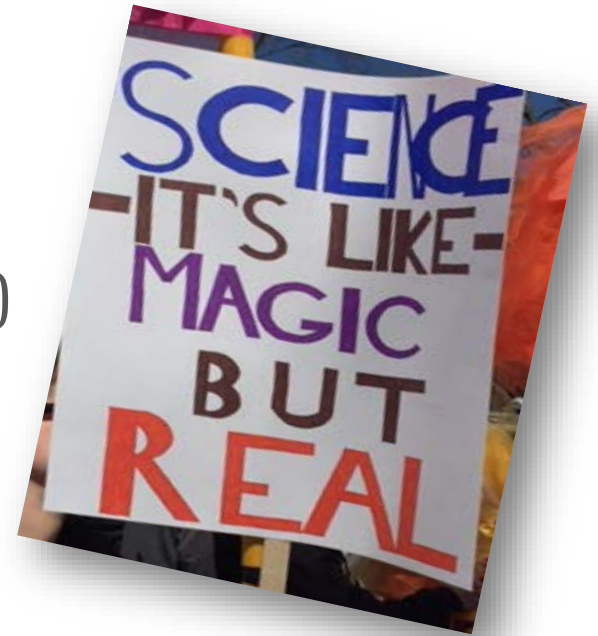
Private funding isn't enough to offset the president's proposed budget cuts, they say.

ADRIENNE LAFRANCE | MAR 16, 2017 | SCIENCE

# COMMUNICATE RESEARCH?

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



# FACULTY NEED HELP?

Helping faculty increase competitiveness

1. Alternative metrics
2. Name recognition



Altmeter



**Impactstory**

# FACULTY NEED HELP?

## Helping faculty communicate

**M**  
MICHIGAN MEDICINE  
UNIVERSITY OF MICHIGAN

DEPARTMENT OF COMMUNICATION

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Services

- Call Management
- Crisis Communications
- Digital Arts
- Branding Guidelines
- Internal Communications
- Marketing Communications
- News Services
- Physician Relations
- Social Media
- Web Design

# FACULTY NEED HELP?

## Helping faculty communicate



Office of Research

### ◀ Managing a Research Operation

[Industry-Sponsored Clinical Trial Contracting](#)

[Reporting Requirements](#)

[Record Retention](#)

### Communications

[Common Communications Needs](#)

[Internal Audience Communications](#)

[External Audience Communications](#)

[Communications Training](#)



[Home](#) › [Office of Research](#) › [Administration](#) › [Managing a Research Operation](#) › [Communications](#)

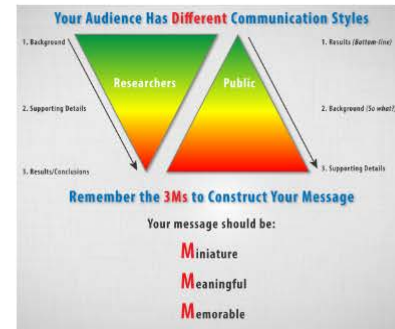
## Communications

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.

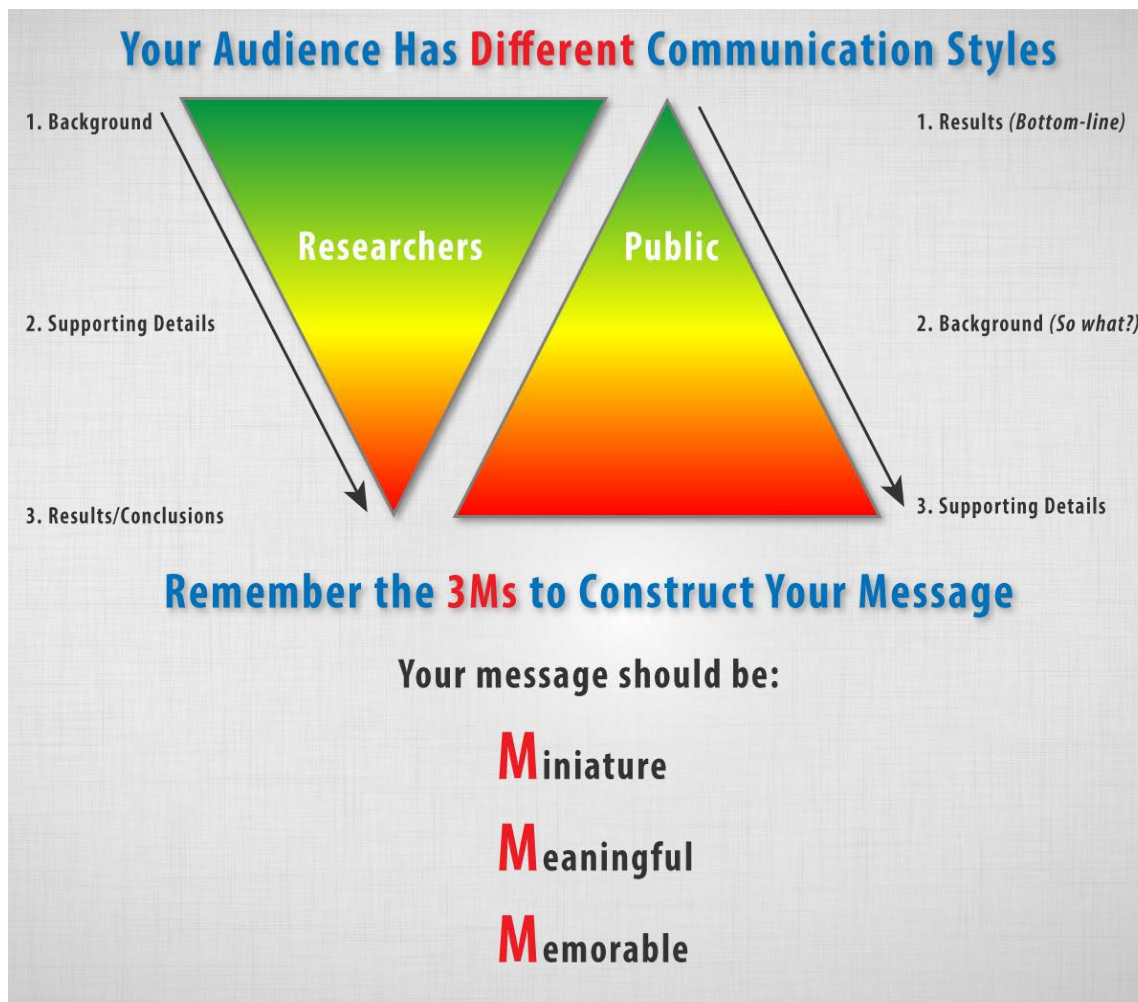


*Model adapted from the American Association for the Advancement of Science*





# FACULTY NEED HELP?









# FACULTY NEED HELP?

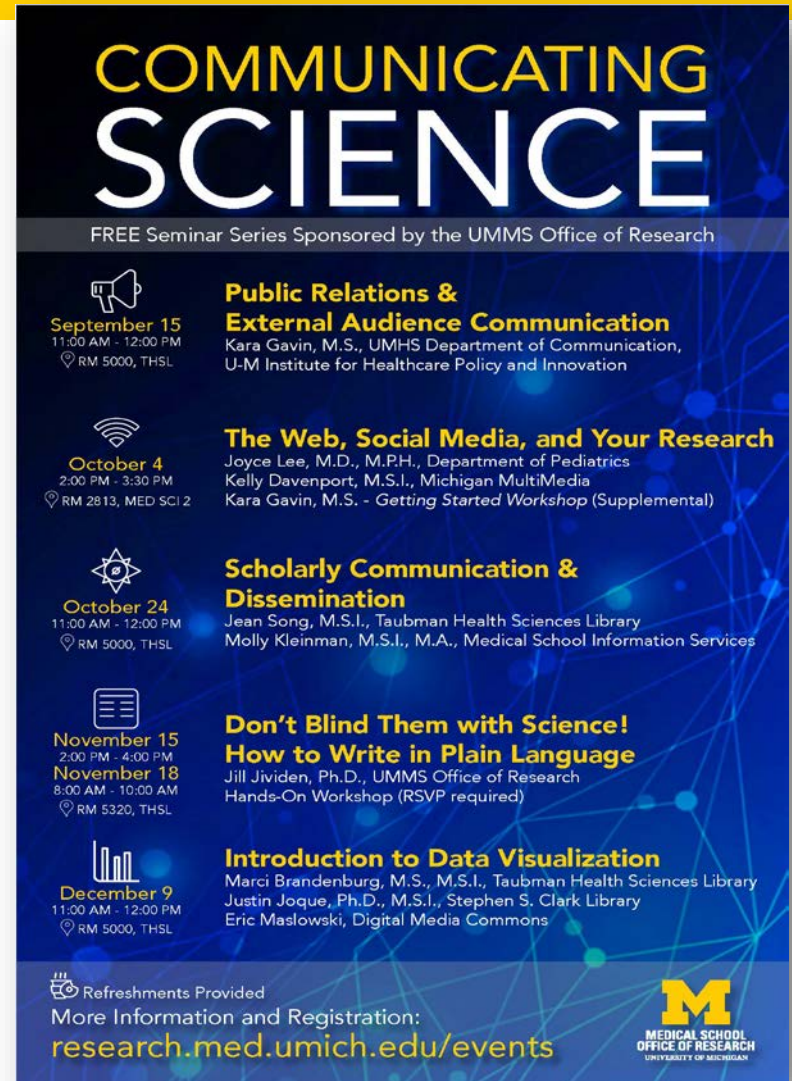
## Helping faculty communicate

### 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



**COMMUNICATING SCIENCE**

FREE Seminar Series Sponsored by the UMMS Office of Research

**September 15**  
11:00 AM - 12:00 PM  
RM 5000, THSL  
**Public Relations & External Audience Communication**  
Kara Gavin, M.S., UMHS Department of Communication, U-M Institute for Healthcare Policy and Innovation

**October 4**  
2:00 PM - 3:30 PM  
RM 2813, MED SCI 2  
**The Web, Social Media, and Your Research**  
Joyce Lee, M.D., M.P.H., Department of Pediatrics  
Kelly Davenport, M.S.I., Michigan MultiMedia  
Kara Gavin, M.S. - *Getting Started Workshop* (Supplemental)

**October 24**  
11:00 AM - 12:00 PM  
RM 5000, THSL  
**Scholarly Communication & Dissemination**  
Jean Song, M.S.I., Taubman Health Sciences Library  
Molly Kleinman, M.S.I., M.A., Medical School Information Services

**November 15**  
2:00 PM - 4:00 PM  
**November 18**  
8:00 AM - 10:00 AM  
RM 5320, THSL  
**Don't Blind Them with Science! How to Write in Plain Language**  
Jill Jividen, Ph.D., UMMS Office of Research  
Hands-On Workshop (RSVP required)

**December 9**  
11:00 AM - 12:00 PM  
RM 5000, THSL  
**Introduction to Data Visualization**  
Marc Brandenburg, M.S., M.S.I., Taubman Health Sciences Library  
Justin Joque, Ph.D., M.S.I., Stephen S. Clark Library  
Eric Maslowski, Digital Media Commons

Refreshments Provided  
More Information and Registration:  
[research.med.umich.edu/events](https://research.med.umich.edu/events)

**M**  
MEDICAL SCHOOL  
OFFICE OF RESEARCH  
UNIVERSITY OF MICHIGAN

# Communicating Science Seminar Series

## 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

# Communicating Science Seminar Series

## 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

# Communicating Science Seminar Series

## 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 = **8<sup>th</sup> grade**
- **20% of Americans read at 5<sup>th</sup> grade level or below**
  - Includes 40% of seniors and 50% of minority groups

2003 National Assessment of Adult Literacy (NAAL)



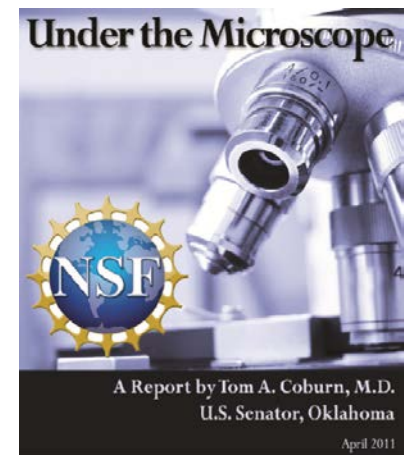
# Communicating Science Seminar Series

## 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
  - Take aim at “wasteful spending”
  - Seize on controversies & safety lapses
  - Staffers may have little scientific background



# Communicating Science Seminar Series

## Public Relations and External Audiences



“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....

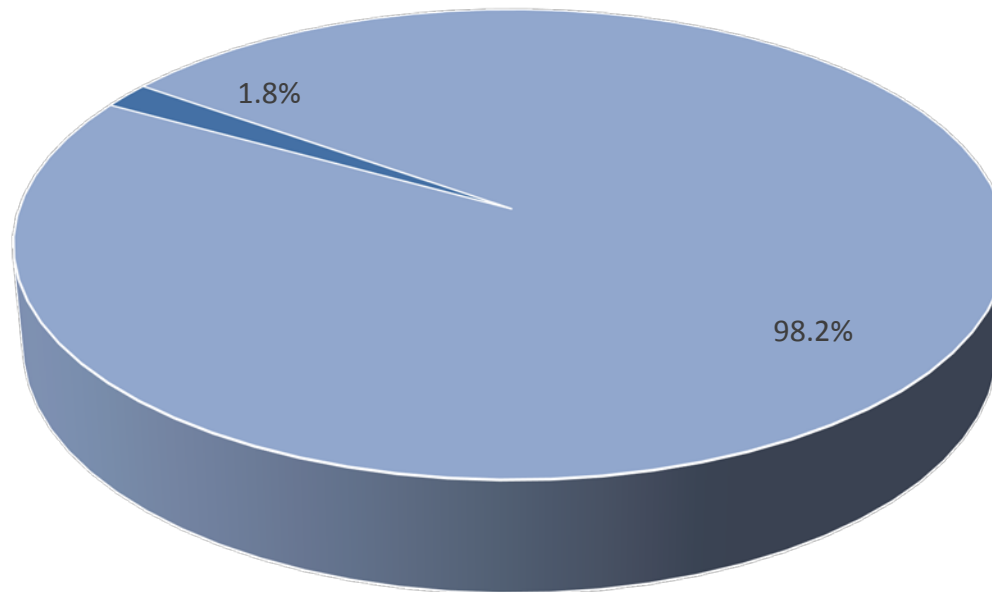
“We envision a society that is infused by science literacy...in the sense that there is a **shared belief that scientific expertise can be trusted, that scientific misconduct and fraud are rare, and that social organizations can and should be structured to enable science literacy rather than prevent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

[National Academy of Sciences, “Science Literacy: Concepts, Contexts, and Consequences,” August 2016.](#)

# Communicating Science Seminar Series

## Public Relations and External Audiences

### STEM Workforce v. US Population:



■ STEM ~ 5.7M    ■ Everyone else ~310M

<http://www.nsf.gov/statistics/2016/nsb20161/#/report/chapter-3/u-s-s-e-workforce-definition-size-and-growth>

# Communicating Science Seminar Series

## 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.)

## How U-M Research Gets into the News



# 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)

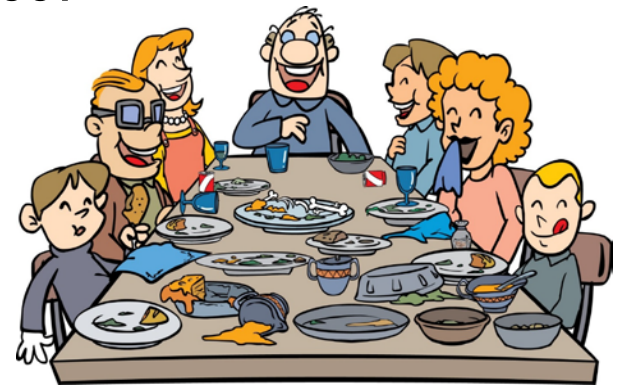
# Communicating Science Seminar Series

## 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?





# Communicating Science Seminar Series

## 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

# Communicating Science Seminar Series

## Public Relations and External Audiences

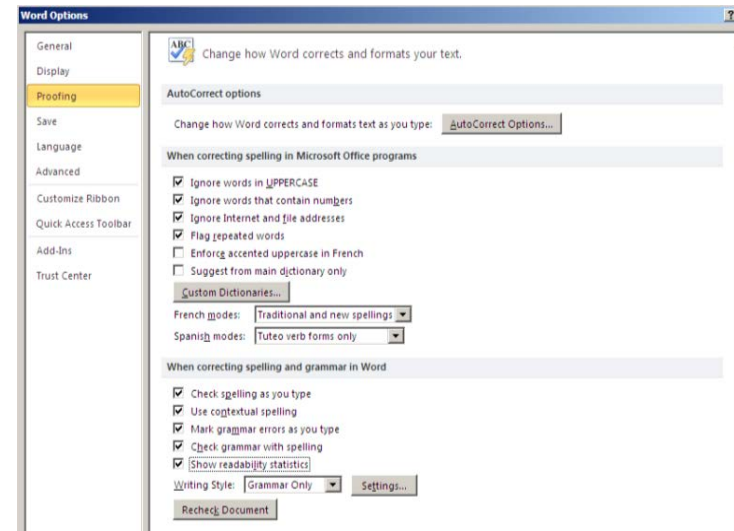


### Communicating with the public:

- 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 8<sup>th</sup> grade (without jargon words you can't avoid), revise!



# Communicating Science Seminar Series

## 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

# Communicating Science Seminar Series

## The Web, Social Media, and Your Research



**Doctor as Designer**  
@joyclee

Joyce Lee, MD, MPH, Designer, Researcher, Umich Assoc Prof, Co-conspirator of [healthdesignby.us](http://healthdesignby.us) Check out [twittersuperuser.com](http://twittersuperuser.com)

Ann Arbor, MI  
[joyceisplayingontheinter.net](http://joyceisplayingontheinter.net)

**Doctor as Designer**

Joyce Lee, MD, MPH Patient-centered Design Thinking Evangelist and Social Media/Technology Enthusiast <http://goo.gl/b9FYBP>  
<http://joyceisplayingontheinter.net/>

ELSEWHERE

 **Doctor as Designer**  
@joyclee

Be nice, be conversational, don't be mean, and don't talk about yourself all the time. Just like in real life. [#rwjfcsp2014](#) [#hscsm](#)



9:16 PM - 2 Nov 2014

 **Doctor as Designer**  
@joyclee

Don't give up before you start. Be patient. Drop in, drop out, drop in. Follow interesting people and listen. [#rwjfcsp2014](#) [#hscsm](#)



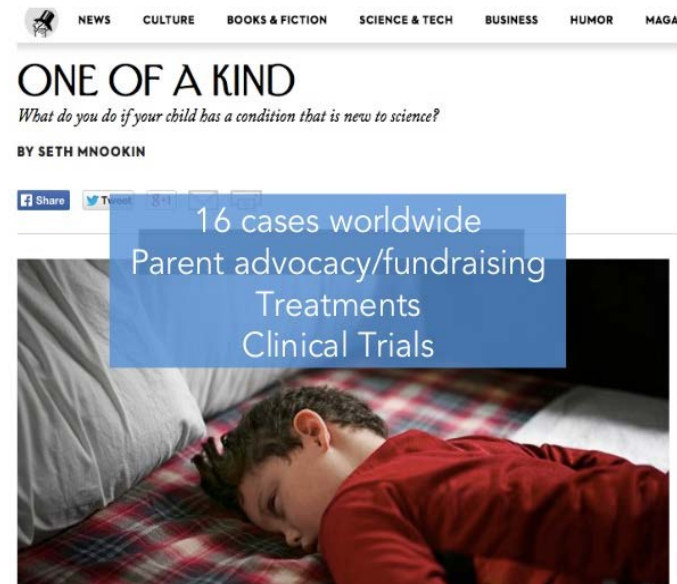
# Communicating Science Seminar Series

## 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](#)



# Communicating Science Seminar Series

## The Web, Social Media, and Your Research





# Communicating Science Seminar Series

## 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



www.useit.com

# Communicating Science Seminar Series

## 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.

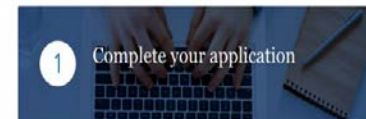
Appear for your biometrics appointment. After we accept your application, we will notify you if we need to take your biometrics: fingerprints, photo, and signature. We will send you an appointment notice if we need biometrics.

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.

### 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](#).



#### 1 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



#### 2 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
- Bring the following documents to the appointment:

# Communicating Sciences Seminar Series

## 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

# Communicating Science Seminar Series

## Plain Language

[“Don’t Blind Them with Science! How to Write in Plain Language”](#)



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

# Communicating Science Seminar Series

## 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

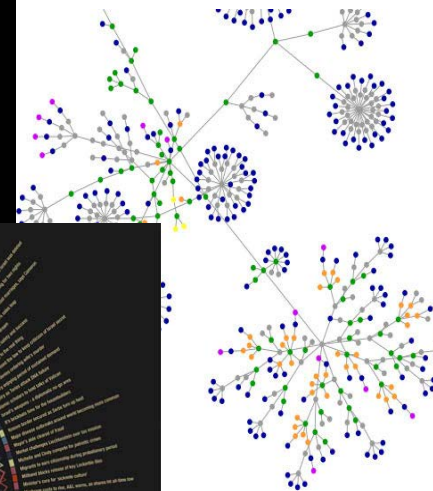
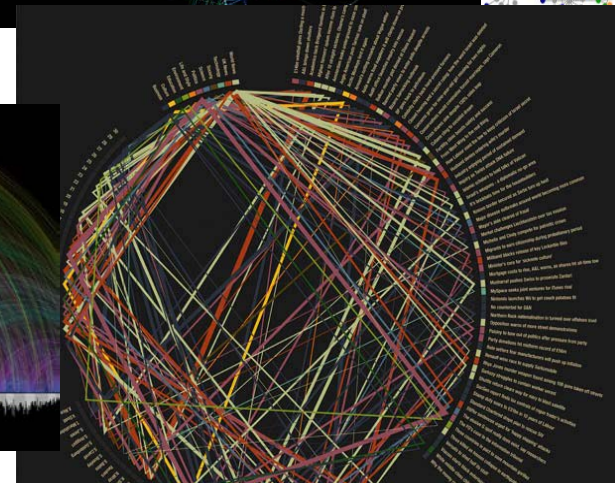
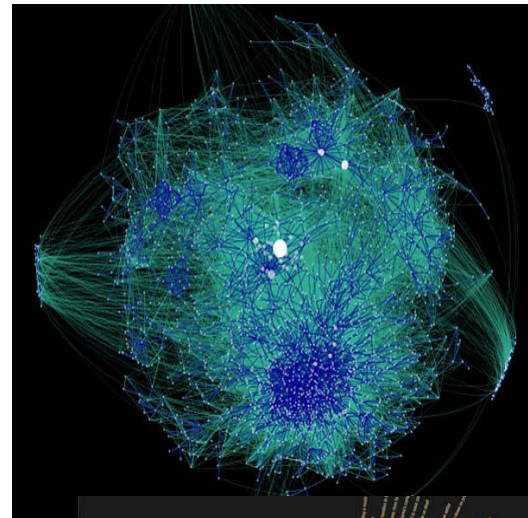
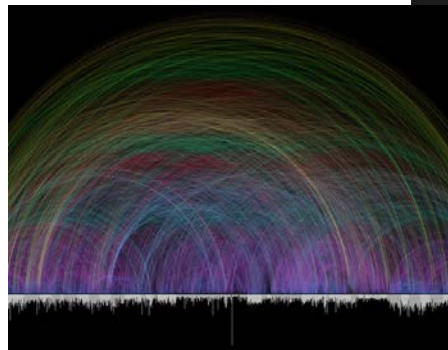


# Communicating Science Seminar Series

## Data Visualization

### Overview:

- Visualization Landscape
- Design Principles
- Interpretation
- Campus Resources





# Communicating Science Seminar Series

## 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

# Communicating Science Seminar Series

## 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)

# Communicating Science Seminar Series

## 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)

# Communicating Science Seminar Series

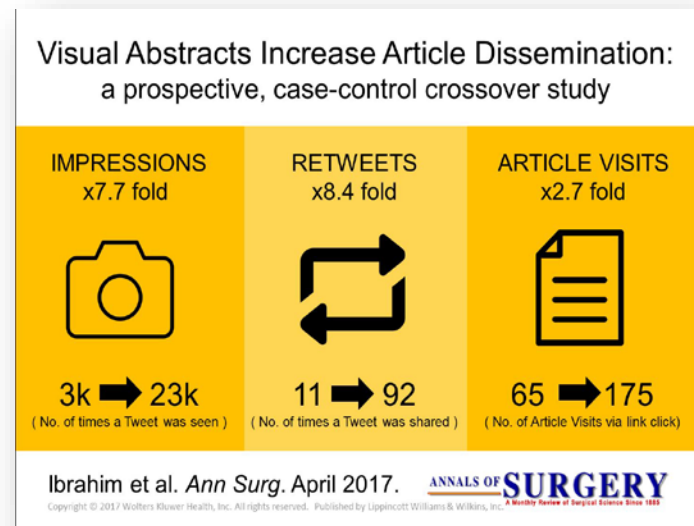
**<Sigh>**

- “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

# Communicating Science Seminar Series

## 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



# THE CONVERSATION

# Writing for The Conversation

# THE CONVERSATION

The screenshot shows the website interface for 'THE CONVERSATION'. The main navigation bar includes categories like Arts + Culture, Economy + Business, Education, Environment + Energy, Ethics + Religion, Health + Medicine (highlighted), Politics + Society, and Science + Technology. Below this, there are 'Follow Topics' such as Affordable Care Act, Marijuana, Opioids, Vaccines, and Zika.

The featured article is titled 'Can the study of epigenomics lead to personalized cancer treatment?' by Fabian V. Filipp, University of California, Merced. The article text states: 'A field called epigenomics looks at chemical modifications that do not change our DNA sequence but can affect gene activity. What are the limitations, and can biomedicine use this to our advantage?' There is a 'More' button at the bottom right of the article.

To the right of the article is a 'Research and Expert Database' section with a search bar containing 'e.g. Cyber security' and a 'Search' button. Below this, it lists 'Popular: food, water, transport, health, and energy.' There are also sections for 'Editors' Picks' and 'Most Read past week' with various article thumbnails and titles.

# Writing for The Conversation

**What is it?**





# Writing for The Conversation

## 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

## What they **DO** want

- Research-based evidence
- Around 1000 words
- Broad audience
- Informed opinion, commentary or explainers

## What they **DON'T** want

- Going beyond your expertise
- A pre-written piece
- Political spin
- Self-promotion

# 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.

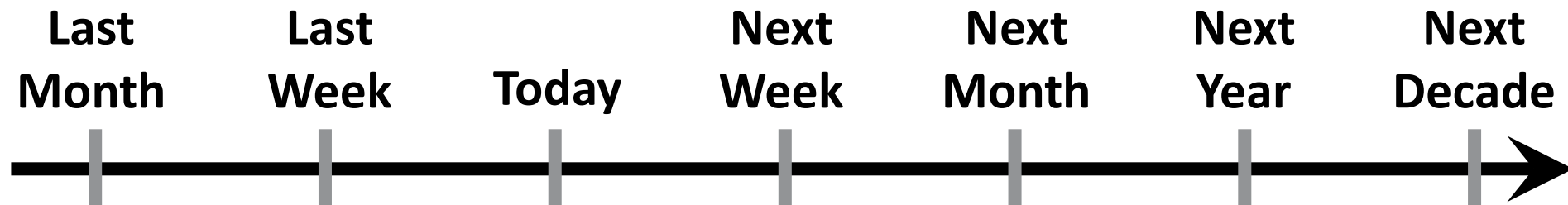


# Types of Articles

**Timely:  
Reactive**

**Timely:  
Proactive**

**Timeless**



# Types of Articles

**Timely:  
Reactive**

Timely:  
Proactive

Timeless

Commentary, context  
or relevant information  
related to a current event






# THE CONVERSATION

Why public health worries don't have to ruin your cookie dough



136,276 Views

-  Twitter 24
-  Facebook 432
-  LinkedIn 5

July 14, 2016



**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

**Timely:  
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*






# THE CONVERSATION

## Why dementia burden may be less than feared

September 28, 2016 8.51pm EDT



8,923 Views

 Twitter	31
 Facebook	68
 LinkedIn	4

Sept. 28, 2016

	<b>Roger L. Albin</b> Professor of Neurology, University of Michigan
	<b>Kenneth Langa</b> 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.*






# THE CONVERSATION

## Sex and other myths about weight loss



851,000 Views

 Twitter	32
 Facebook	35
 LinkedIn	6

June 28, 2016



**Tammy Chang**  
Assistant Professor, Family  
Medicine, University of Michigan



**Angie Wang**  
Resident, Department of Family  
Medicine, University of Michigan

# Types of Articles

Timely:  
Reactive

Timely:  
Proactive

**Timeless**

*A timeless piece can become  
timely due to current events*





# THE CONVERSATION

What are septic shock and sepsis? The facts behind these deadly conditions



77,000 Views

 Twitter 58

 Facebook 145

 LinkedIn 29

June 6, 2016



**Hallie Prescott**

Assistant Professor in Internal  
Medicine, University of Michigan



**Theodore Iwashyna**

Associate Professor, University of  
Michigan



# Resources & References

Communicating Science Seminar Series: [PDFs & recorded seminars](#)

- AAAS Center for Public Engagement with Science:  
<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>
- 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](#)



# THANK YOU!

## Contact:

Jill Jividen, PhD

Asst. Director for Research Development

734-764-3634

[jjgoff@umich.edu](mailto:jjgoff@umich.edu)



## Many thanks to:

Amy Puffenberger, MAM

Morgan Hayward

Ann Curtis

Kara Gavin, MS

Elyse Auerbach, PhD

Beth LaPensee, PhD

Joyce Lee, MD

Jean Song, MSI

Eric Maslowski

Marci Brandenburg, MS, MSI

Kelly Davenport, MSI

Justin Joque, PhD, MSI

Molly Kleinman, MSI, MA