

Social media for science communication

PUT YOURSELF WHERE THE PEOPLE ARE

Social media by the numbers

Monthly active users (2015)

- Twitter: 320 million
- Facebook: 1.59 billion
- Blog readers: 150 million (2014)





Why engage?

Great question! Ask it before diving in.

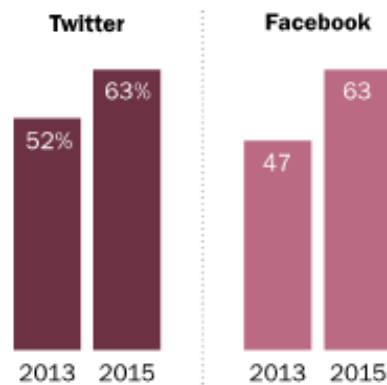
Why engage?

- Reputation of a school or institute
- Promote your cause
- Show thought leadership
- Engage people in a topic
- Drive traffic
- Promote a personal brand
- Connect with like minded people

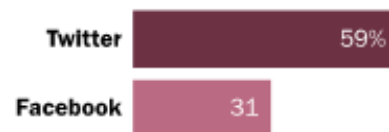
Know what you want to achieve before starting to engage
THEN figure out how you are going to measure success

Facebook and Twitter News Use is on the Rise

% of ___ users who get news there



Of those who get news from ___ in 2015, percent who have kept up with a news event as it was happening

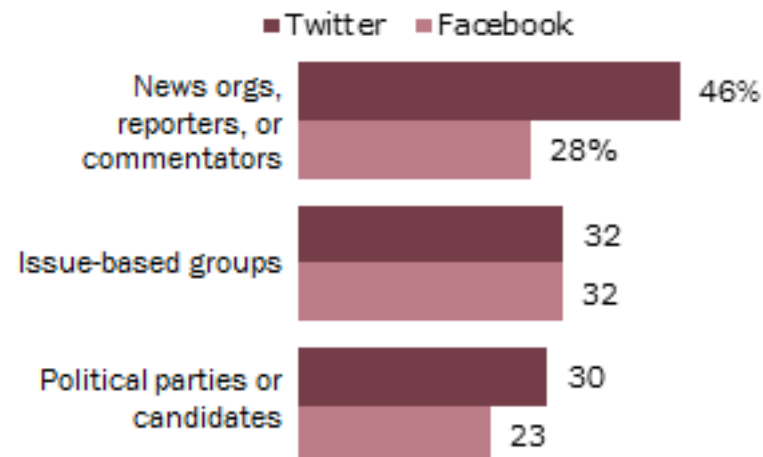


Social Media and News Survey, March 13-15 & 20-22, 2015. Q2, Q4, Q7, Q11.

PEW RESEARCH CENTER

Twitter Users More Likely to Follow News Outlets

% of ____ users who follow...



American Trends Panel (wave 1). Survey conducted March 19-April 29, 2014. Q33d, Q34d.

PEW RESEARCH CENTER

Anatomy of a tweet



Anatomy of a tweet



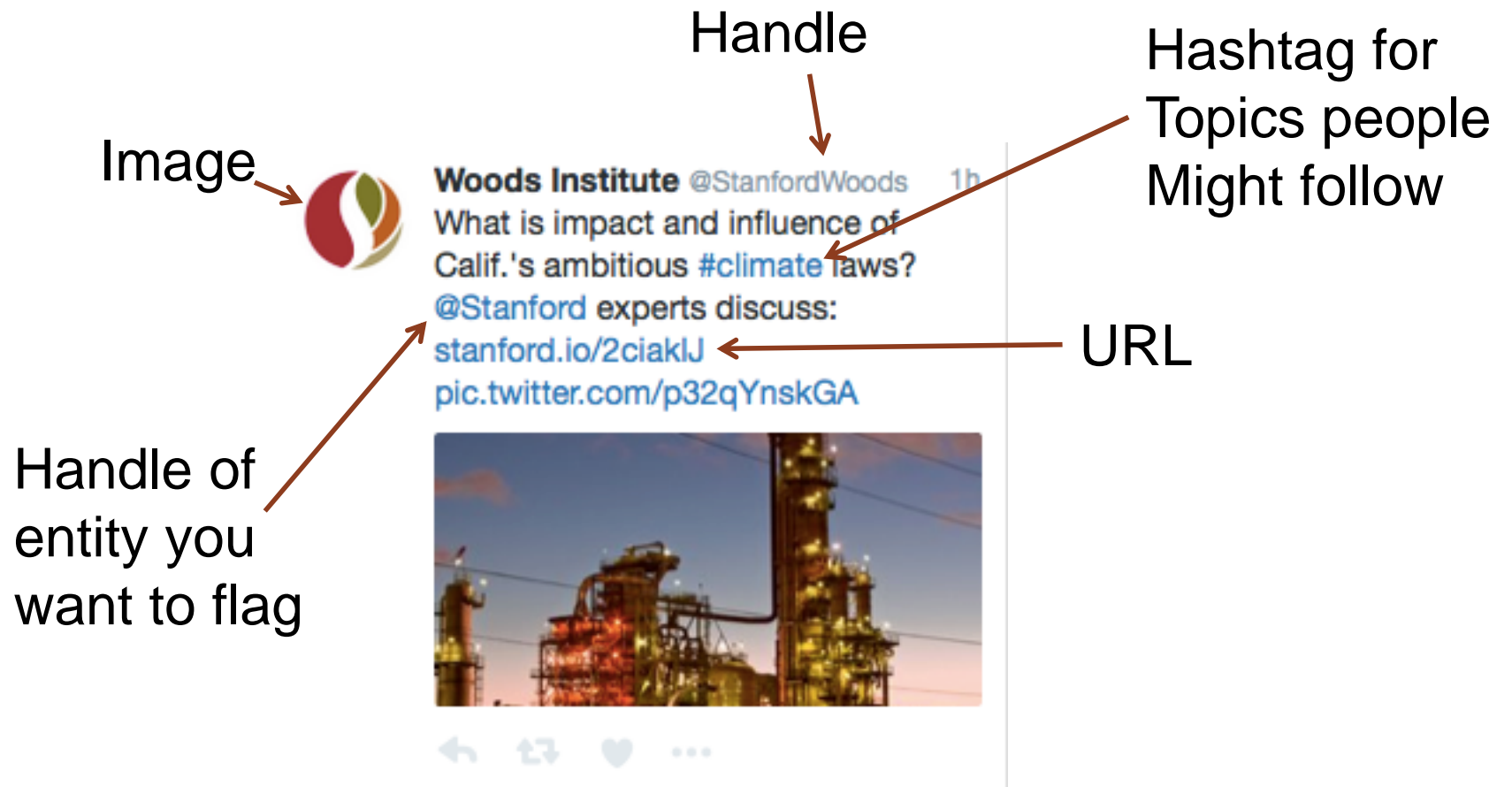
Anatomy of a tweet



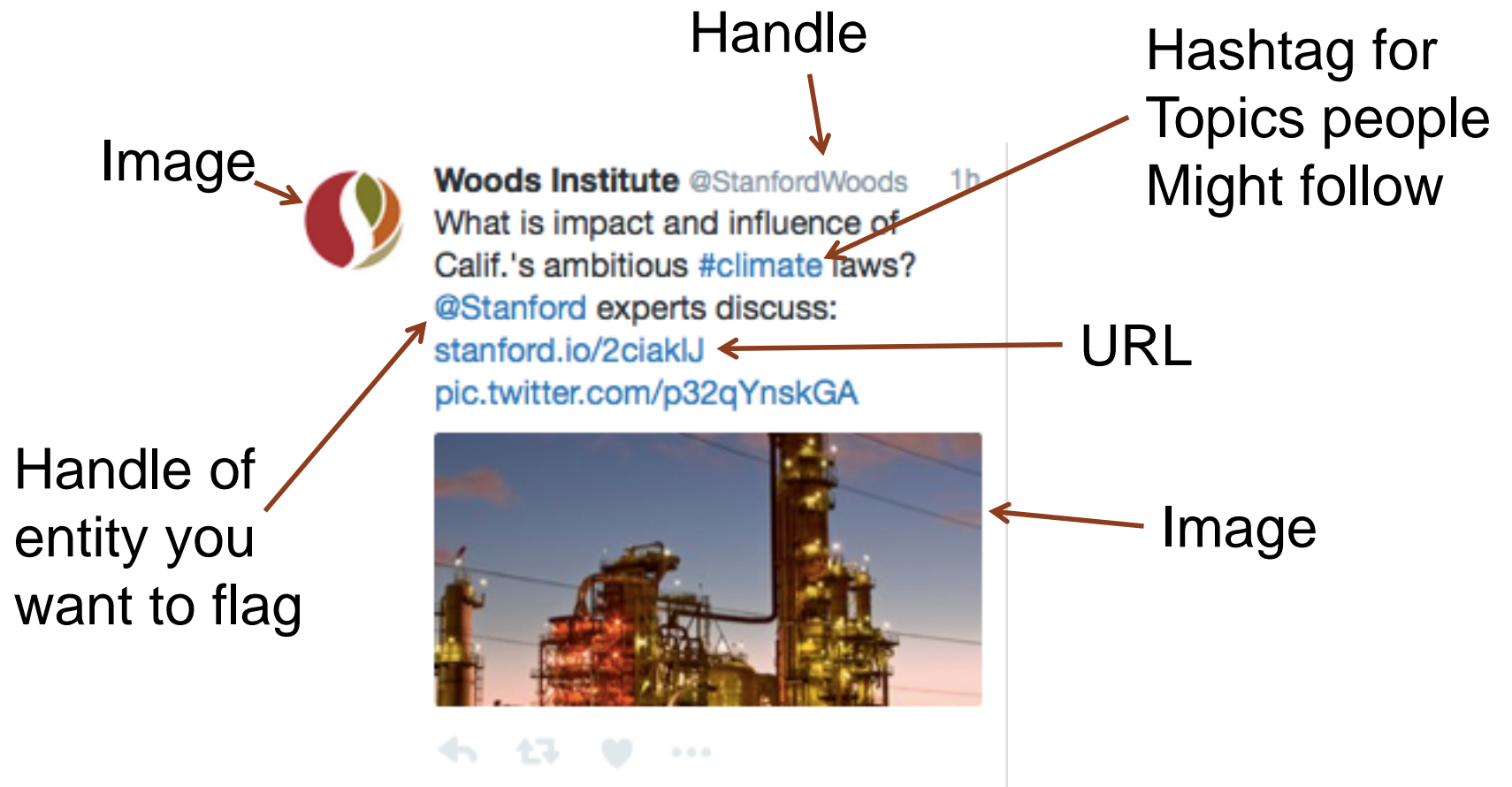
Anatomy of a tweet



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Anatomy of a tweet



Feed styles



Lists of people who I follow

- Journalists
- Scientists
- Science organizations

Feed styles

Tweets by a
single user








Stanford Bio-X retweeted









Stanford University


Feed styles


Tweets and retweets of an individual





**Amy Adams** @runnr 1d
I've had my head under a rock,
which is why I'm just now learning
about Alice Ting's cool work:
[scopeblog.stanford.edu/2016/08/29/
che...](https://scopeblog.stanford.edu/2016/08/29/che...)
   

 Amy Adams retweeted

**Jill Filipovic** @JillFilipovic 2d
I don't follow football, but quietly
noting that I've read more about a
dude not standing than I have about
the dudes who beat & rape women.
   

**Amy Adams** @runnr 2d
The situation is so sad. What I just
can't fathom is that the US won't get
it together to fund research.

Liz Szabo @LizSzabo
Just keeps getting worse: Zika virus
now linked to hearing loss in
babies. usat.ly/2c5BbxP
pic.twitter.com/n3FYInarse


Tweetdeck

Keep your friends close and your enemies in a
Tweetdeck column

Stanford Bio-X @StanfordBioX 1d
Looking for a good book?
@NIHDirector got these
recommendations from
@KarlDeisseroth:
pic.twitter.com/IX4t5XwAlj

Stanford Bio-X @StanfordBioX 2d
The balance of gut bacteria and
inflammation influences the risk of
colorectal cancer: stan.md/2bzbNIU
pic.twitter.com/OrMFp1iVcu

Stanford Bio-X @StanfordBioX 2d
Alice Ting developed a chemical
spray paint to identify all the
molecules in the synapse:
stan.md/2bWeVcz

Stanford Bio-X retweeted
Stanford Medicine @StanfordMed 3d
Quality versus quantity:
@StanMedMag on what we need —
and what's rewarded —in research:
stan.md/2aZ5nek

National Academy of Medicine @theNAM 1m
Learn more about clinical
management and #publichealth
interventions for the #ZikaVirus:
ow.ly/OuCw303OipD #ZikaResearch
#Zika

STAT @statnews 1m
From the @BostonGlobe: Could this
be the end of surgical caps for
surgeons? bit.ly/2bW9aNb
pic.twitter.com/8UTLLvt8up

Jill Filpovic retweeted
Eric Michael Garcia @EricMGa... 11m
@JillFilpovic Right here.
theatlantic.com/politics/archi...

Pia Christensen @AHCJ_Pia 10m
Is Texas too easy on troubled Dallas
psychiatric hospital? by
@milesmoffeit bit.ly/2bYwxTO via
@dallasnews

Rebecca Traister retweeted
Aminatou Sow @aminatou 21h
The Cut @TheCut
Whoopi Goldberg's thoughts on
marriage: "I don't want somebody

abpro @abprolabs 10m
#Immunotherapy and future
directions in #oncology
ow.ly/SMGh303f8fD @PMLivecom

AAI @ImmunologyAAI 25m
Combining #immunotherapy with
chemotherapy reduces #cancer
reoccurrence in dormant breast
cancer cells.
eurekalert.org/pub_releases/2...
#Immunology

Cancer MoonShot 2020 @Mo... 31m
#Oncologists – Join the mission & the
@Moonshot2020 Clinical
Community. bit.ly/2bWLVCM
#immunotherapy
pic.twitter.com/V1w0NnOoLI

J Clinical Oncology @JCO_ASCO 1h
IL-10 - an immune activating
cytokine in cancer #immunotherapy
bit.ly/2cftGI4

Precision Med US @PrecisionM... 1h
#Immunotherapy: hype or hope? -
goo.gl/alerts/gWjT8
#PrecisionMedUS
#PrecisionMedicine



A case story

Stanford chemists develop a new method of cancer immunotherapy

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Stanford University @Stanford 9d

A team led by @CarolynBertozzi has developed a new approach to cancer immunotherapy:
stanford.io/2bxeCpH
pic.twitter.com/FJahdPt9HI



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Stanford Bio-X @StanfordBioX 9d

[.@CarolynBertozzi](#) created a chemical lawn mower as a novel method for [#cancer](#)

[#immunotherapy](#):
stanford.io/2bAQDEF




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Stanford researchers develop a new target for immunotherapy: sugars


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Stanford researchers develop a new target for immunotherapy: sugars

 **Stanford Medicine** @StanfordMed 7d
Stanford researchers develop a new target for immunotherapy: sugars:
stan.md/2bAH2KP
← ↻ ❤ ...

Exercise

Write 2 tweets based on the news story link in your packet.

- A personal tweet
- A tweet as Stanford

URL is 22 characters

Image is 26 characters



Facebook

- Organizations use it to retain and engage existing friends



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 - You are Science Friday
 - Cal Academy
 - IFLS
 - Neil deGrasse Tyson

Facebook

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- Hard to use as a way of spreading content, unless:
 - You are Science Friday
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 - Neil deGrasse Tyson
- Can educate existing friends on a personal page

Who blogs about science?

- Individual scientists blogging about their work or their field
- Scientific organization blog about the the science they fund
- News outlets run blog to fill in background on longer stories, or to cover other topics (Nature Jobs)
- Groups of scientists might start a blog on a field of research (NeuWrite West)

Case study of a blog post

Cancer has proven to be a wily foe, in part because the cells are so effective at hypnotizing the immune system that should act to destroy them.

In recent years, cancer therapies that activate the body's own immune system to destroy tumors have improved the odds against some cancers, including formerly incurable skin cancers like that afflicting former President Jimmy Carter. But the immunotherapies currently available only activate one arm of the multi-pronged immune system – the adaptive immune system – and aren't always effective.

Carolyn Bertozzi, a Stanford professor of chemistry, has now shown that removing certain sugars surrounding breast cancer cells can recruit a second arm of the immune system – the innate immune system. The approach, described in a study published Aug. 22 in Proceedings of the National Academy of Sciences, greatly improved the effectiveness of a breast cancer drug in a lab dish, opening up a new avenue in the fight against cancer.

“This is a whole new dimension to immune therapy,” Bertozzi said, adding that she thinks it could be the first of many therapeutic approaches involving the sugars that surround cells, called the glycocalyx.

Case study of a blog post

Cancer immunotherapies have been big news in the past few years, particularly after former President Jimmy Carter's melanoma was **successfully treated** with one such immune-stimulating therapy.

What I hadn't known before working on a recent story is that all immunotherapies currently available activate the immune system in the same way (they aim for a **pair of proteins** found on cancer cells and some immune cells.)

Chemist **Carolyn Bertozzi**, PhD, told me that many more pathways exist that cancer cells exploit for evading the immune system. Any of those could also make a potential target for immunotherapies.

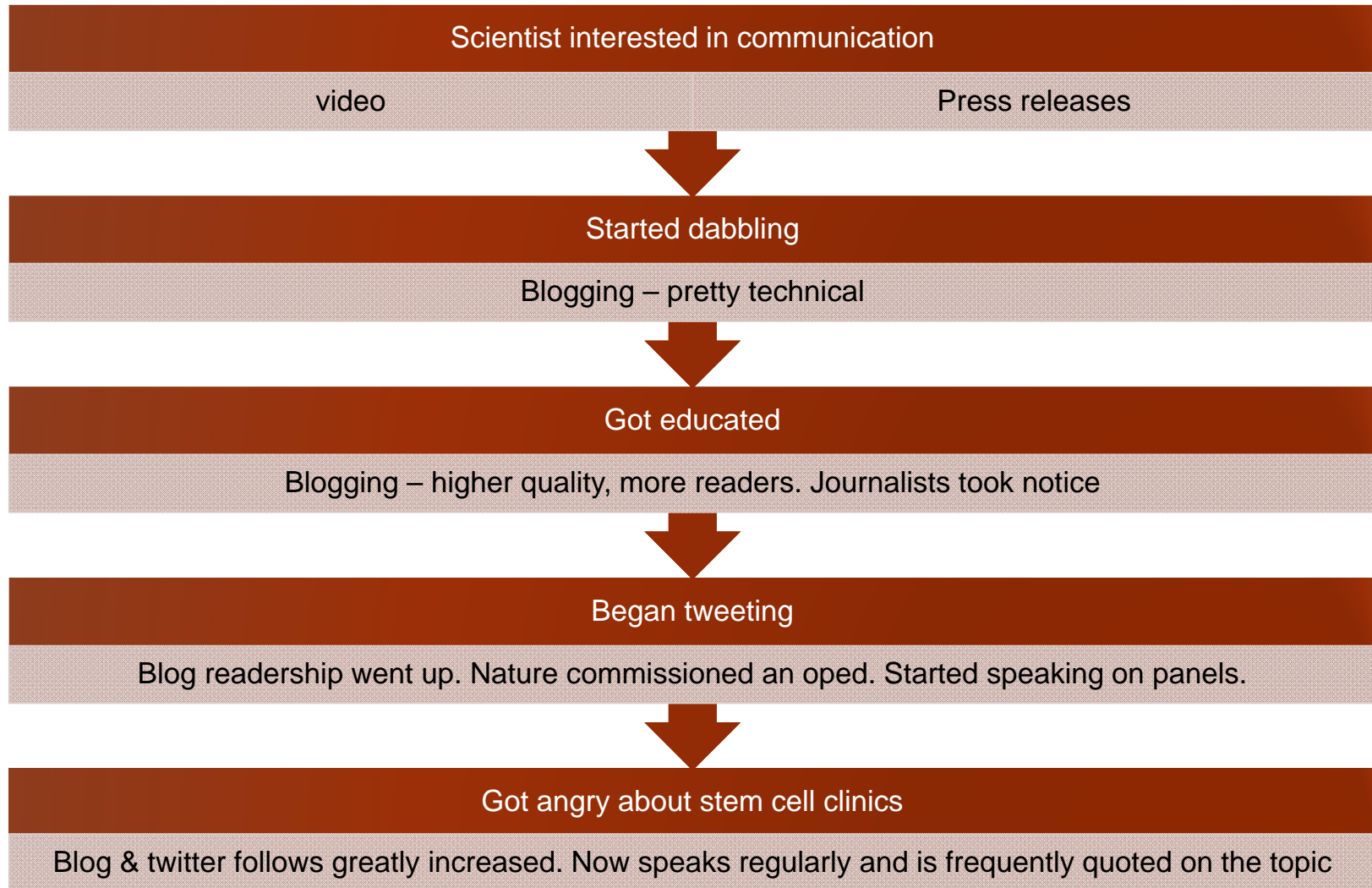




Exercise

Using the same news story, write a blog post

Case study: Paul Knoepfler





Social media roundup

- Be real (because if you are trying to hard it shows)



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- To pull that off, know who you are talking to



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- And know why those people would follow you



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And the biggie:

- Engage, don't teach



Additional reading/listening

Arne will send some links