



# Altmetrics in the NIH Biosketch: demonstrate the reach and influence of your research

Altmetric.com | @altmetric  
[altmetric.com/explorer](https://altmetric.com/explorer)  
[support@altmetric.com](mailto:support@altmetric.com)

# Introductions

Liesa (Baltimore, MD)

Director of Market Development

20+ years working with scientific organizations to reach, serve and engage their customers and stakeholders



[liesa@altmetric.com](mailto:liesa@altmetric.com)

Patty (Chicago, IL)

Senior Engagement Manager

5+ years as a librarian in hospital and academic environments, where she developed a passion for science communication and research impact.



[engagement@altmetric.com](mailto:engagement@altmetric.com)



# Acknowledgements

Staff at Galter Health Sciences Library & Learning Center:

- **Kristi Holmes**, Library Director, Associate Professor, Preventive Medicine, Health and Biomedical Informatics Division
- **Karen Gutzman**, Head, Research Assessment and Communications
- **Pamela Shaw**, Biosciences & Bioinformatics Librarian



# Today's agenda

- Poll
- Altmetrics basics
- Defining impact
- Finding pathways to impact using Altmetric
  - Example narratives and ways of incorporating metrics into your Biosketch
- Live demo
- Questions



What are  
altmetrics



# Altmetrics basics

**Most stakeholders** that research is meant to reach **do not publish or do research**. They do **talk** about research.

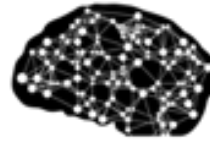
Altmetric uncovers who they are...



General Public



Government &  
Policy Makers



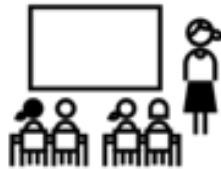
Investigators



Research  
communicators/  
watchdogs



Practitioners



Advocacy/  
Non-profits



Tech Transfer



Interested parties



# ALTMETRICS



Indicators of  
non-traditional attention  
and engagement with  
digitally published  
research and scholarship.





## Citations

Often slow to accrue  
(2-5 years)



**ALTMETRICS**  
Immediate





# Altmetric Attention Sources

What does the donut represent?

## The Colors of the Donut

- |                               |                      |
|-------------------------------|----------------------|
| Policy documents              | Google+              |
| News                          | LinkedIn             |
| Blogs                         | Reddit               |
| Twitter                       | Faculty1000          |
| Post-publication peer-reviews | Q&A (Stack Overflow) |
| Facebook                      | Youtube              |
| Sina Weibo                    | Pinterest            |
| Syllabi                       | Patents              |
| Wikipedia                     |                      |



17 categories representing thousands of websites

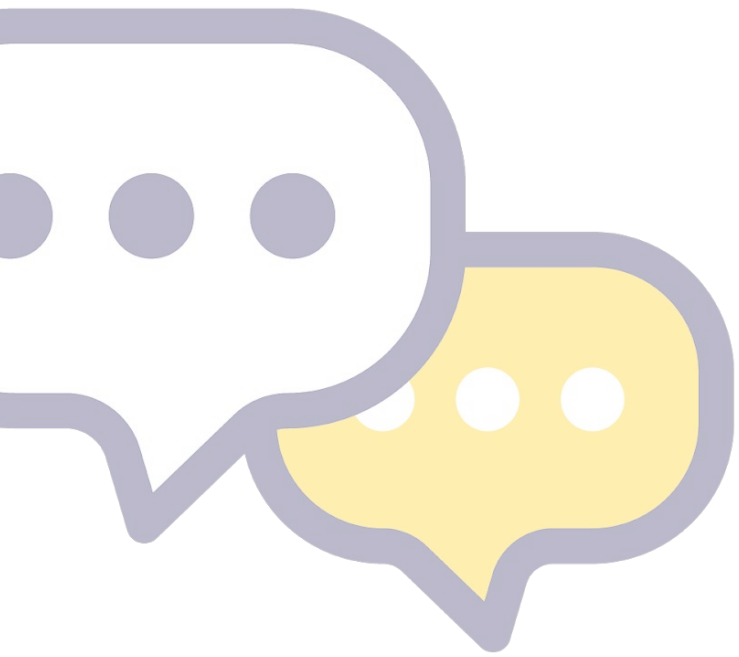


# What does the score represent?



Mention type	Weight Points
News	8
Blogs	5
Twitter	1
Facebook	0.25
Sina Weibo	1
Wikipedia	3
Policy Documents (per source)	3
Patents	3
Q&A	0.25
F1000/ Publons/ Pubpeer	1
YouTube	0.25
Reddit/Pinterest	0.25
LinkedIn	0.5





**Context is key**

**Look at what people are saying, not just at the numbers**

**Attention  $\neq$  positive impact or quality**



What is impact?



# Defining impact

# Defining Impact

An 'effect on, change or benefit to the economy, society, culture, public policy or services, health, the environment or quality of life, beyond academia.'<sup>(1)</sup>



# Defining Impact

An 'effect on, change or benefit to the economy, society, culture, public policy or services, health, the environment or quality of life, **beyond academia.**'<sup>(1)</sup>



# GOING BEYOND

“Dissemination is not impact: even if you have impressive numbers of reads, downloads, views or listens, how do you know if anyone learned anything from it, benefited, or did anything different as a result? **Keep asking, ‘what happened next?’**”<sup>(1)</sup>



What makes a 4\* research impact case study for REF2021? Mark Reed, Bella Reichard, Jenn Chubb, Ged Hall, Lucy Jowett and Alisha Peart <https://www.fasttrackimpact.com/single-post/2017/12/19/What-makes-a-4-research-impact-case-study-for-REF2021>. March 19, 2019.



Altmetric  $\neq$  Impact







Research  
Output



Research  
Impact

Challenge: how to bridge the gap between the  
research and its impact?





Research  
Output

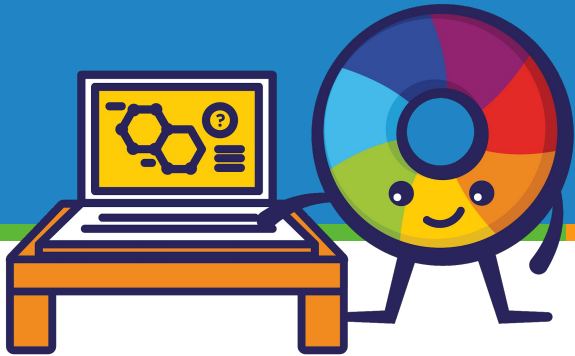


Research  
Impact

Altmetric can be used to gather evidence to  
underpin the impact and add to the narrative



# How to discover pathways to impact using Altmetric Explorer



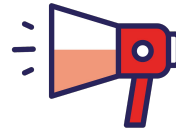
# Discover **pathways to impact** using Altmetric data, including:



**Policy  
mentions**



**Patent  
mentions**



**Mass media  
mentions**



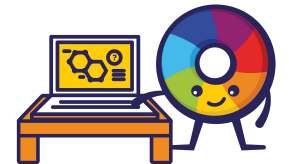
**Social media  
mentions**





## C. Contributions to Science

1. The prevalence of peanut allergy among children in Western countries has doubled since 2005. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat.
  - a. Randomized Trial of Peanut Consumption in Infants at Risk for Peanut Allergy, NEJM, Feb 2015. 25705822
  - b. Impact of peanut consumption in the LEAP Study: Feasibility, growth, and nutrition, The Journal of Allergy and Clinical Immunology, October 2016. 27297994
  - c. Association of Staphylococcus aureus colonization with food allergy occurs independently of eczema severity, The Journal of Allergy and Clinical Immunology, August 2019. 31160034
  - d. Effect of Avoidance on Peanut Allergy after Early Peanut Consumption, NEJM, April 2016. 26942922



## **Purpose**

“We evaluated strategies of peanut consumption and avoidance to determine which strategy is most effective in preventing the development of peanut allergy in infants at high risk for the allergy.”

## **Conclusion**

“The early introduction of peanuts [*first 11 months of life*] significantly decreased the frequency of the development of peanut allergy among children at high risk for this allergy and modulated immune responses to peanuts.”

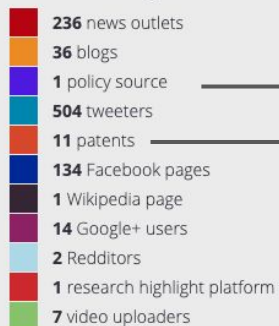


? About this Attention Score

In the top 5% of all research outputs scored by Altmetric

MORE...

Mentioned by



Citations

906 Dimensions

*Randomized Trial of Peanut Consumption  
in Infants at Risk for Peanut Allergy  
2015, NEJM*

Changing policy

Changing industry  
(patents related to  
allergen dosing and  
composition)

“Changes clinical practice” -  
expert reviews



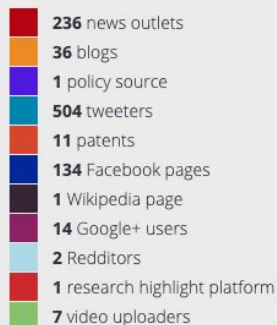


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MORE...

### Mentioned by



### Citations

906 Dimensions

# Randomized Trial of Peanut Consumption in Infants at Risk for Peanut Allergy 2015, NEJM



## Fairfax Allergy, Asthma and Sinus Clinic

Allergist

We are a full-service adult and pediatric allergy and asthma care center. We also have a location in Woodbridge, VA.

3903A Fair Ridge Dr  
Fairfax, VA 22033



## Family Allergy Asthma & Sinus Care

Allergist

Family Allergy Asthma & Sinus Care

10370 Park Rd Ste 202  
Charlotte, NC 28210

<http://www.AllergyForAll.com/>



## Complete Pediatrics, PC

Pediatrician

Keeping Children Healthy

451 State St North Haven,  
CT 06473

<http://completepediatrics.net/>



## Allergy & ENT Associates of Middle TN

Family Medicine Practice

Allergy & ENT Associates of Middle Tennessee, PC provides a full range of services including treatment of head and neck cancer, sinus disease, allergies, sleep disorders and facial aesthetics in our Hermitage, Tennessee office

3901 Central Pike, Ste 351  
Hermitage, TN 37076

<http://www.MyAllergyENT.com/>



*Randomized Trial of Peanut Consumption  
in Infants at Risk for Peanut Allergy  
2015, NEJM*



Tweet by **Greg Garner (@greggarner87)**

**7.2K followers**

Watching Rotten on Netflix. Episode about food (esp peanut) allergies. And wouldn't you know it, the study by @rhoworld gets brought up as a promising potential in the fight against allergies. #LifeAtRho <https://t.co/7s9KDO8Tej>

MORE...



Tweet by **Adam Cifu (@adamcifu)**

**15.9K followers**

Covering this trial in "Critical Appraisal of the Landmark Medical Literature" tomorrow. One of the best examples of @medicalreversal. Feel like @VPrasadMDMPH and @barttels2 should be making guest appearances. <https://t.co/IZpk5mPcqR>

11 patents

134 Facebook pages



Tweet by **Faculty Opinions (@Facultyopinions)**

**23.6K followers**

Changes clinical practice: peanut consumption in first year of life prevents allergy in children already at risk <http://t.co/ROukFDVUmX>

Citations

906 Dimensions

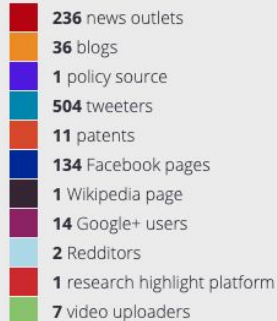


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MORE...

Mentioned by



Citations

906 Dimensions

*Randomized Trial of Peanut Consumption  
in Infants at Risk for Peanut Allergy  
2015, NEJM*

**The New York Times**

New Product Is First to Claim It  
May Reduce Peanut Allergies



“The guidelines for how to approach allergens in children are changing, the science is changing, and it’s important for parents to know.”

# Repeat for all the papers I cite in my Contributions to Science...



Randomized Trial of Peanut Consumption in Infants at Risk for Peanut Allergy

Article in **New England Journal of Medicine**, February 2015



Effect of Avoidance on Peanut Allergy after Early Peanut Consumption

Article in **New England Journal of Medicine**, April 2016



Impact of peanut consumption in the LEAP Study: Feasibility, growth, and...

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...and put what I've learned into a  
narrative format





# Forming a narrative

- Tailor your story for the intended purpose and audience.
- Think of your stories as a descriptive narrative of your research efforts and accomplishments.
- If using publication and citation data, use information from databases for descriptive content.
- If applicable, use a variety of article level metrics to supplement your publication data.
- Use Plain Language. Plain language is clear, concise, organized, and appropriate for the intended audience.

From: Becker Medical Library NIH Biosketch libguide  
[https://beckerguides.wustl.edu/NIH\\_Biosketch](https://beckerguides.wustl.edu/NIH_Biosketch)

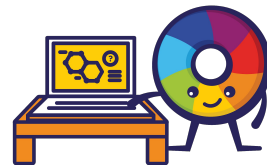




# Forming a narrative

*Use altmetrics to describe the reach and impact of your work*

“This work led to sweeping reversals on policy regarding introducing allergens to children, including recommendations by American Academy of Pediatrics and National Institute of Allergy and Infectious Disease...

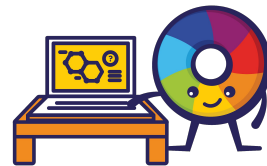




# Forming a narrative

*Use altmetrics to describe the reach and impact of your work*

“This work led to sweeping reversals on policy regarding introducing allergens to children, including recommendations by American Academy of Pediatrics and National Institute of Allergy and Infectious Disease. This work has also influenced public discourse on the topic, and the results have been shared widely on Twitter, clinicians’ Facebook pages, and mass media outlets including The New York Times and Washington Post, evidencing public awareness of this topic and translation to practice.”







# Forming a narrative

*Use altmetrics to describe the reach and impact of your work*

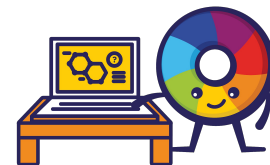
“This work led to sweeping reversals on policy regarding introducing allergens to children, including recommendations by American Academy of Pediatrics and National Institute of Allergy and Infectious Disease. This work has influenced public discourse, and the results have been shared widely online, including in 721 news stories in 35 countries, 1,120 tweets, and 192 Facebook posts. This work was also rated as ‘exceptional’ and ‘changes clinical practice’ by 2 experts on Faculty Opinions.”



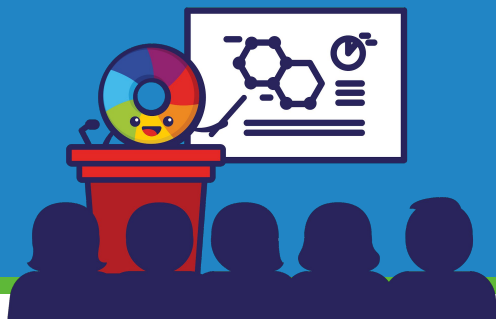


## C. Contributions to Science

1. The prevalence of peanut allergy among children in Western countries has doubled since 2005. This work led to sweeping reversals on policy regarding introducing allergens to children, including recommendations by American Academy of Pediatrics and National Institute of Allergy and Infectious Disease. This work has also influenced public discourse on the topic, and the results have been shared widely on Twitter, clinicians' Facebook pages, and mass media outlets including The New York Times and Washington Post, evidencing public awareness of this topic and translation to practice (Altmetric.com).
  - a. Randomized Trial of Peanut Consumption in Infants at Risk for Peanut Allergy, NEJM, Feb 2015. 25705822. **RCR: 47; 377 news stories**
  - b. Impact of peanut consumption in the LEAP Study: Feasibility, growth, and nutrition, The Journal of Allergy and Clinical Immunology, October 2016. 27297994. **134 news stories; 7 patent mentions**
  - c. Association of Staphylococcus aureus colonization with food allergy occurs independently of eczema severity, The Journal of Allergy and Clinical Immunology, August 2019. 31160034. **61 news stories; 133 tweets**
  - d. Effect of Avoidance on Peanut Allergy after Early Peanut Consumption, NEJM, April 2016. 26942922. **RCR 14; 7 patent mentions**



# Live Demo



How will you report on the impact of your research  
for your grant application or renewal?

Ask us  
about

# The Altmetric CTSA Reporting Support Service

Help NCATS understand the impact of your hub's  
research

Liesa Ross  
Director of Market Development, Americas  
[liesa@almetric.com](mailto:liesa@almetric.com)

# Questions?

Patty Smith, MLIS  
[engagement@altmetric.com](mailto:engagement@altmetric.com)



# Thank you!

Questions?  
[support@altmetric.com](mailto:support@altmetric.com)