packback
Fearlessly curious.

November 2018

Evaluating Sources

CRAAP Test

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CRAAP Test

Evaluating Sources

When you do research, you want to find the best information to support your ideas. This requires careful evaluation of the information you find.

Evaluate information…

- to find the most relevant information for your topic and assignment
- to ensure the quality and reliability of your research
- to find expert views, opinions, and research on your topic
- to weed out unreliable, biased, outdated, and/or incorrect information
- to make sure you get the information your professor is seeking

The CRAAP Test provides one framework for evaluation by assessing:

- Currency
- Relevance
- Authority
- Accuracy
- Purpose

Currency:

How timely is the information you are using?

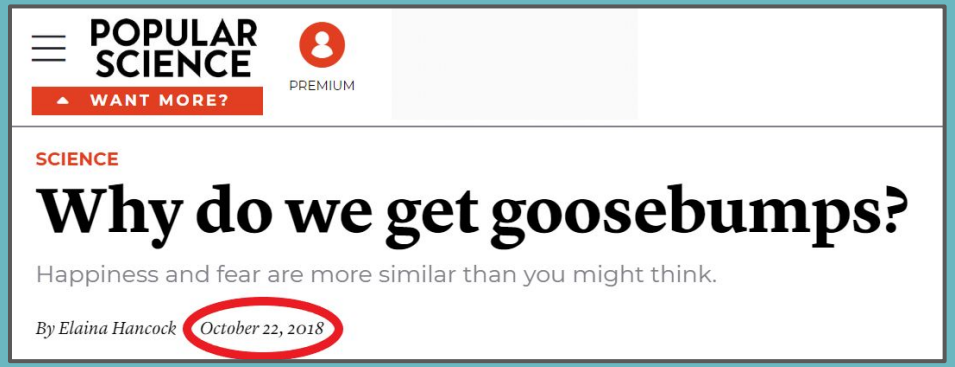
Clues:

- Is there a publishing date available?
- Is there a copyright date available?
- Has the site been revised or updated?
- Are the citations within your source current?

Case Study

Your classmate is curious about goosebumps and you would like to answer their question on Packback. Is this a current source?

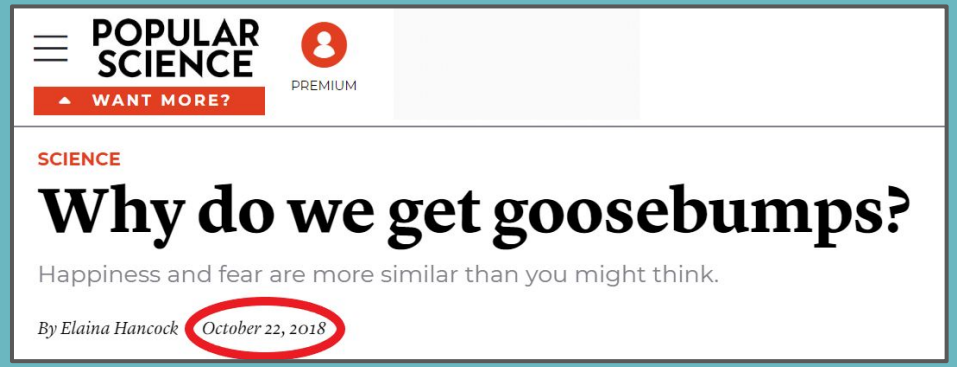
https://www.popsci.com/why-do-we-get-goosebumps



Case Study

Yes. This is relatively current.

The article was written recently and cites sources that aren't out of date. Note that some fields move faster than others! Something written a couple years ago is likely still extremely relevant in a history course, but might be outdated in a computer science course.



Relevance:

The importance of the information for your needs

Clues:

- Does the information relate to your topic or answer your question?
- Who is the intended audience?
- Is the information at an appropriate level (i.e. not too elementary or advanced for your needs)?
- Have you looked at a variety of sources before determining this is one you will use?
- Would you be comfortable using this source for a research paper?

Case Study

Here is another article the Popular Science piece cites. Would this be a relevant source when answering our classmate's question about goosebumps?

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4158628/

Int J Trichology. 2014 Jul-Sep; 6(3): 88–94.
doi: [10.4103/0974-7753.139077]
PMCID: PMC4158628
PMID: 25210331

Beyond Goosebumps: Does the Arrector Pili Muscle Have a Role in Hair Loss?

Niloufar Torkamani,[1,2] Nicholas W Rufaut,[1,2] Leslie Jones,[1,2] and Rodney D Sinclair[1,2]

Author information ▸ Copyright and License information Disclaimer

Abstract

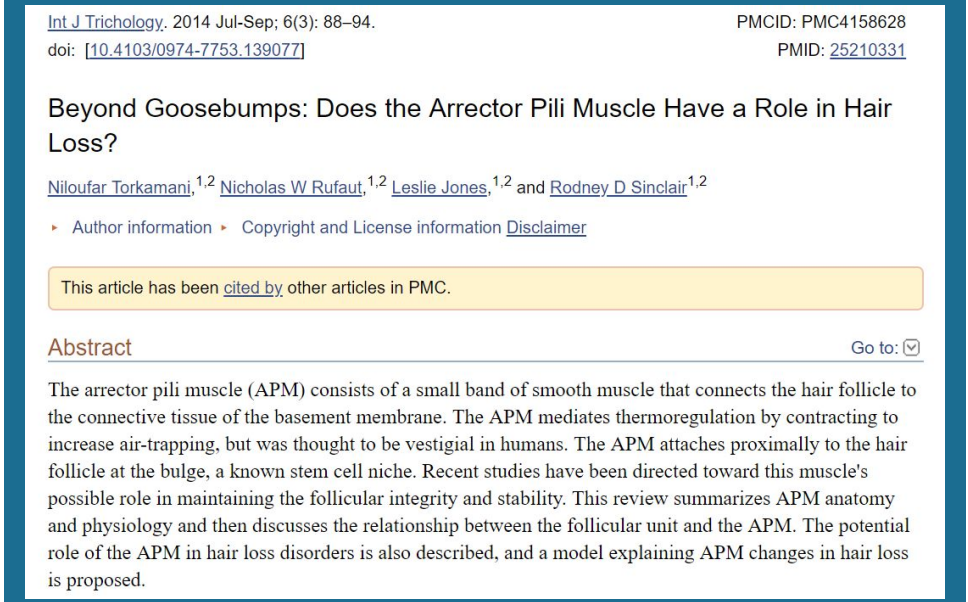
Go to:

The arrector pili muscle (APM) consists of a small band of smooth muscle that connects the hair follicle to the connective tissue of the basement membrane. The APM mediates thermoregulation by contracting to increase air-trapping, but was thought to be vestigial in humans. The APM attaches proximally to the hair follicle at the bulge, a known stem cell niche. Recent studies have been directed toward this muscle's possible role in maintaining the follicular integrity and stability. This review summarizes APM anatomy and physiology and then discusses the relationship between the follicular unit and the APM. The potential role of the APM in hair loss disorders is also described, and a model explaining APM changes in hair loss is proposed.

Case Study

Probably not.

While this is a good source by most metrics, it isn't exactly what you're looking for. Unless you're in an advance science course, this source might be more advanced than you want for a concise response. Further, it's main focus is a muscle involved in goosebumps rather than goosebumps themselves.



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Authority:

The source of the information

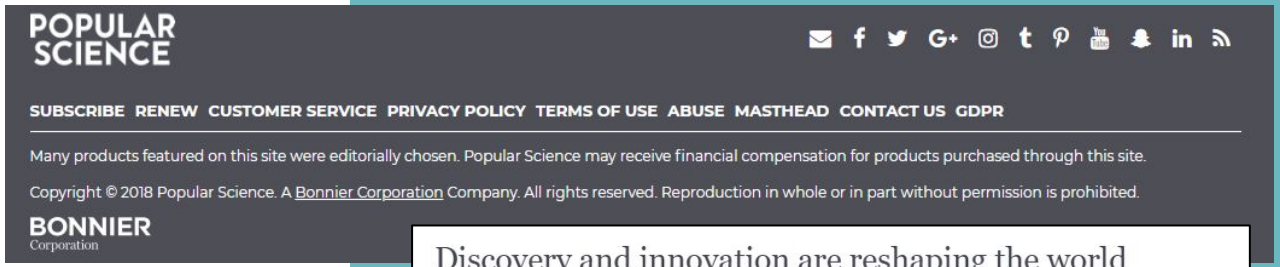
Clues:

- Who is the author/publisher/source/sponsor?
- Are the author's credentials or organizational affiliations given?
- What are the author's credentials or organizational affiliations given?
- What are the author's qualifications to write on the topic?
- Is there contact information, such as a publisher or e-mail address?
- Does the URL reveal anything about the author or source?
    - examples:
        - .com (commercial), .edu (educational), .gov (U.S. government)
        - .org (nonprofit organization), or
        - .net (network)

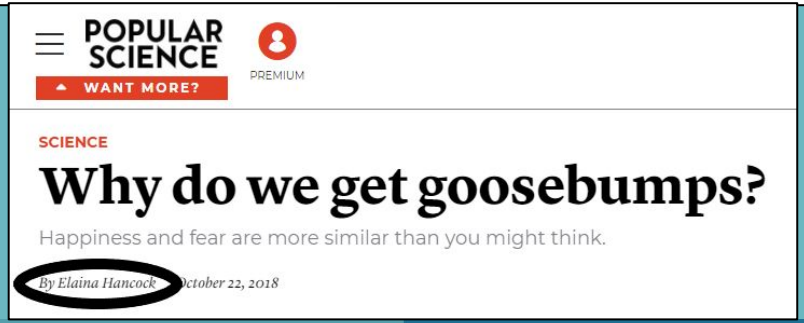
Case Study

Let's revisit the Popular Science article about Goosebumps. We know it's relevant, but what is the authority upon which these claims rest? Is this an authoritative source?

The author, Elaina Hancock, has not written other PopSci articles, and the site doesn't provide other information about her.



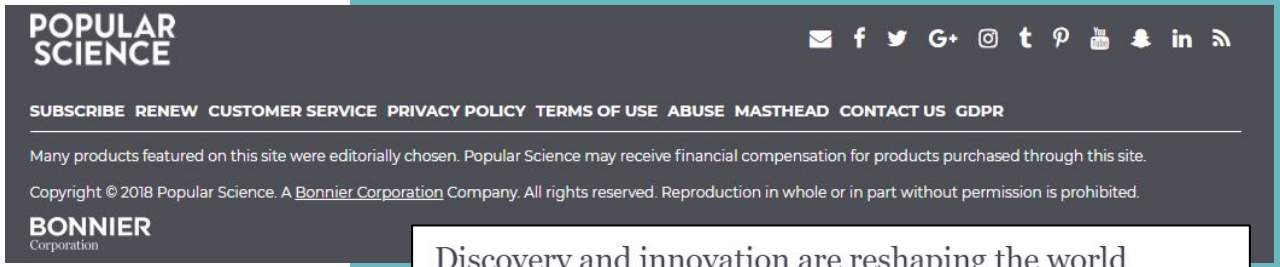
Discovery and innovation are reshaping the world around us, and Popular Science makes even the most complex ideas entertaining and accessible. As the world's largest science and technology magazine, Popular Science presents the best hopes for our planet, our lives, our children and our future through the individuals and ideas that are building a better world. In its nearly 150-year-old print edition, its groundbreaking tablet format and a series of award-winning apps, and on the web, Popular Science delivers the future now.



Case Study

This is a tough one!

On one hand, we know close to nothing about the author, which leaves a lot to be desired. On the other hand, Popular Science is well established and the Bonnier Corporation seems well respected. That might be enough, but we'd like a more expert voice if this was a major assessment.



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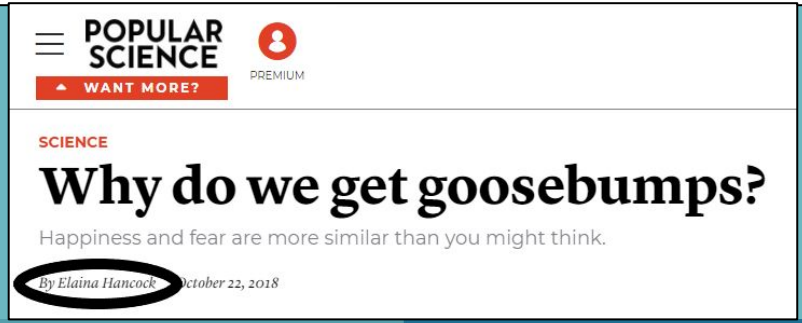


Accuracy:

The reliability, truthfulness, and correctness of the content

Clues:

- Where does the information come from?
- Is the information supported by evidence?
- Has the information been reviewed or refereed?
- Can you verify any of the information in another source or from personal knowledge?
- Does the language or tone seem biased and free of emotion?
- Are there spelling, grammar, or other typographical errors?

Case Study

Do it on your own!

- What is your process to evaluate the accuracy?
- Get to the googling!

https://www.popsci.com/why-do-we-get-goosebumps

The most straightforward thing about goosebumps is their name. When geese are freshly plucked, their skin creates raised bumps where the feathers were. The mechanism that creates goosebumps on humans is also pretty simple. At the end of hair strands closest to the skin, known as the root, are tiny muscles called erector pili. When these muscles tense up, or contract, they cause the hair to stand straight up.

Surprisingly, scientists are not entirely sure why we get goosebumps. But they think they are likely a hand-me-down survival mechanism from our ancestors. Somewhere in the human lineage, we were once covered in much thicker, longer hair than we are now. When early humans would get cold, their hairs would lift and separate slightly. This would trap a small amount of air close so to the skin, effectively creating a layer of insulation.

Purpose:

The reason the information exists

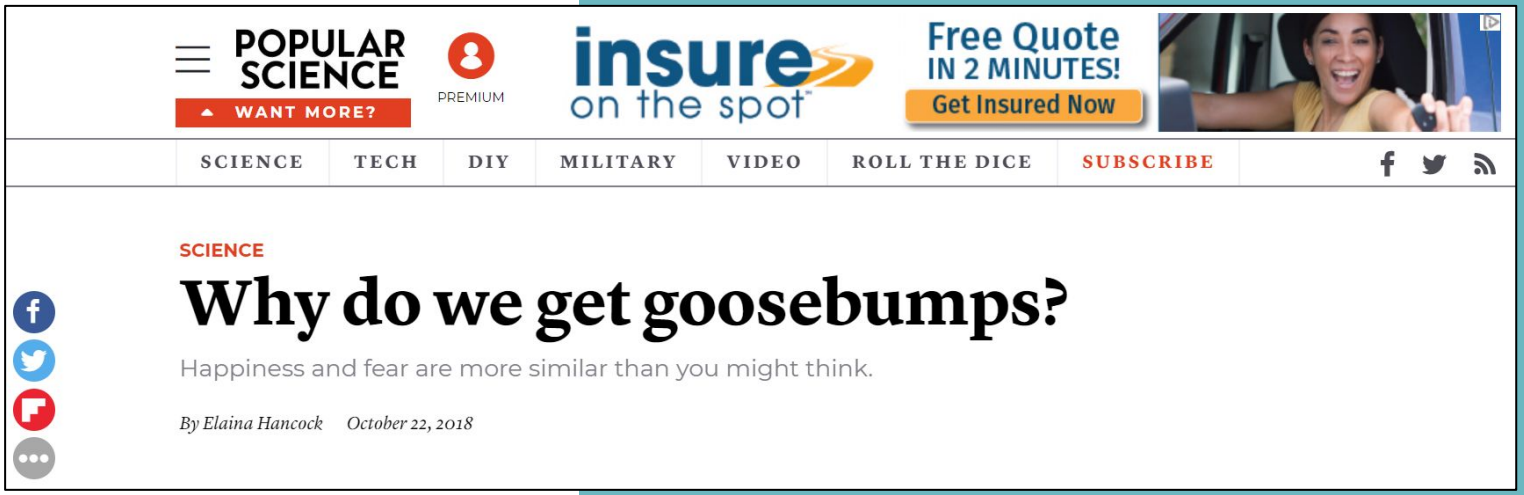
Clues:

- What is the purpose of the information? to inform? teach? sell? entertain? persuade?
- Do the authors/sponsors make their intentions or purpose clear?
- Is the information fact? opinion? propaganda?
- Does the point of view appear objective and impartial?
- Are there political, ideological, cultural, religious, institutional, or personal biases?

Case Study

Do it on your own!

- What is your process to evaluate the purpose for this article?



ADVICE

While this is A LOT of information that you *could* assess, evaluating your sources should be second nature fairly quickly! Find the sites that provide the best sources for your discipline, and visit them frequently when doing research. See what databases you have access to through your school/library, and focus on peer-reviewed work for major assessments. But if you know what to look for, this framework will help you evaluate any source you encounter on the information superhighway!

WARNING!

Always remember that the evaluation of sources always happens within context! For some assignments you may need to limit yourself to peer-reviewed articles, while it's probably OK to reference wikipedia in a casual conversation. Depending on the field you work in or the Professor's expectations, your evaluations will need to adapt.