



A.I. Literacy for Librarians: The future skill of research support

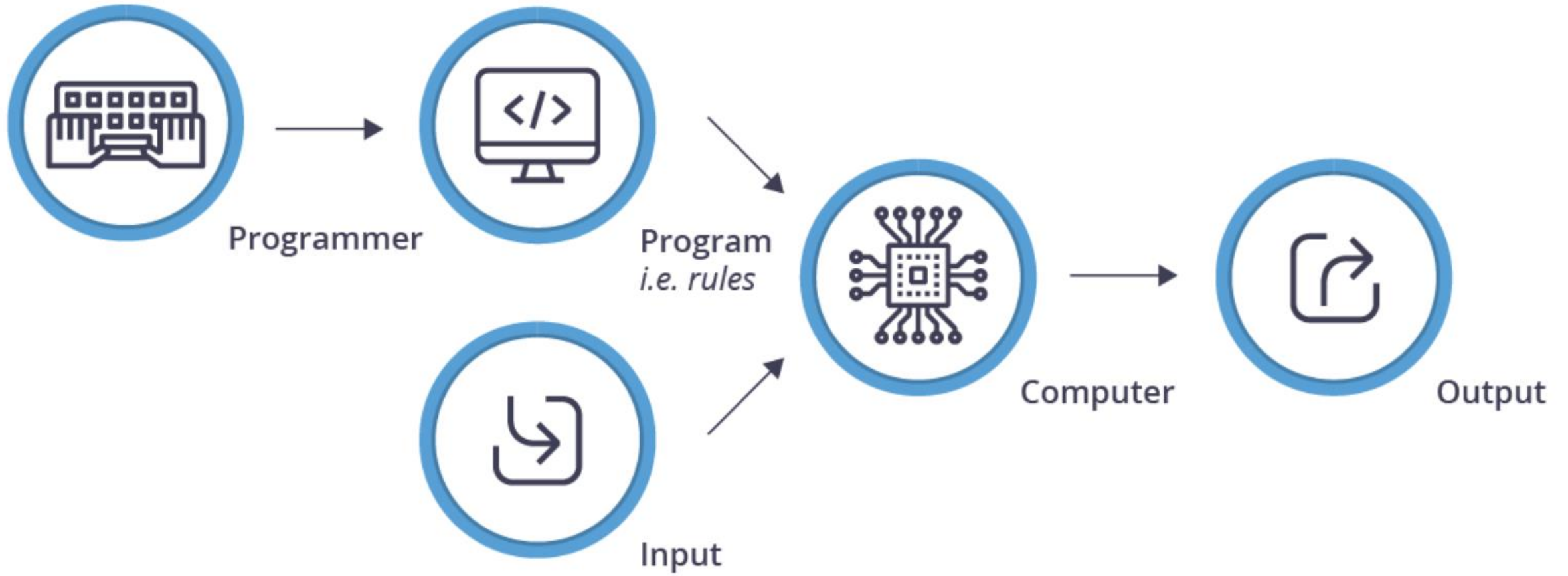
Speaker:
Iris Hsu

Time	
13:30	Opening & Unlocking the World of A.I.
13:50	Hands-on
14:00	Introduction to A.I. in Research Workflow
14:50	Hands-on & break
15:10	A.I. & Academic Integrity
15:45	Discussion: "Empowering librarians for A.I. adoption!"
16:15	End

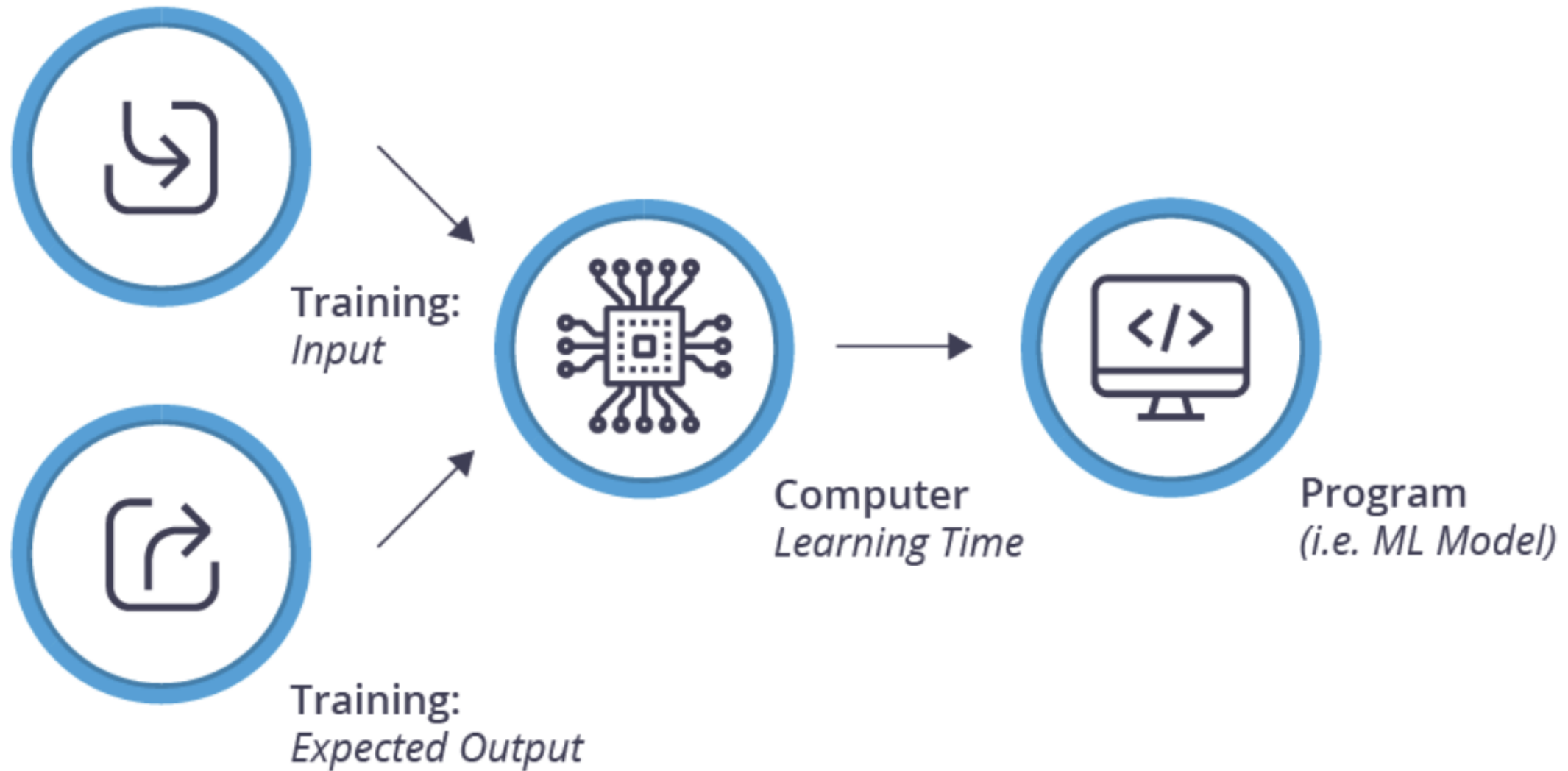


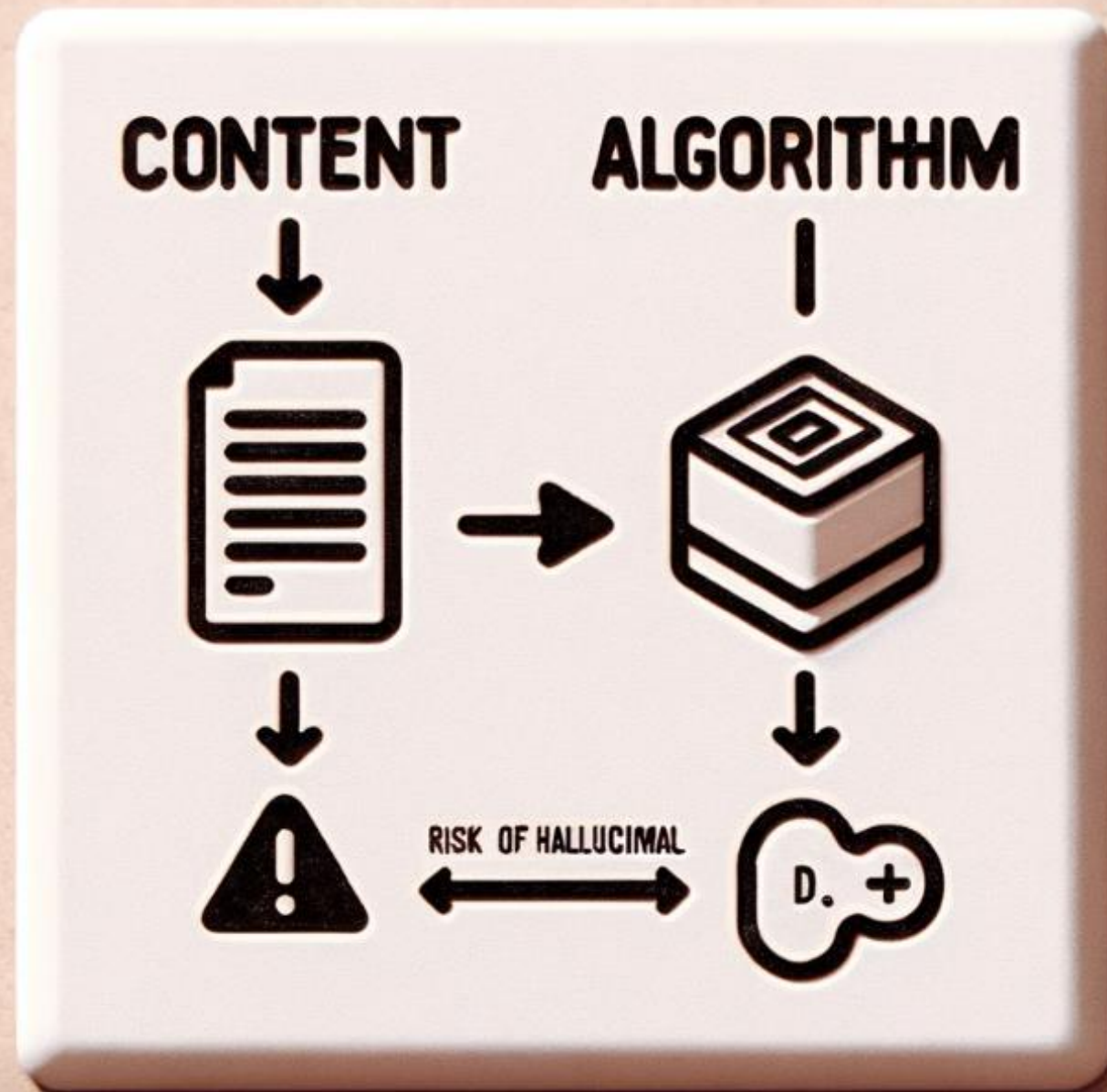
Unlocking the World of A.I.

Traditional Computing



The Machine Learning **Training Process**





- Contents: Making sure they are peer reviewed, like any journals. Always check the sources of the outcome
- Algorithm: Hard to tell but always take note of the accuracy of the outcome
- Risk of Hallucination: AI never says "don't know!"

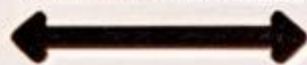
CONTENT



ALGORITHM

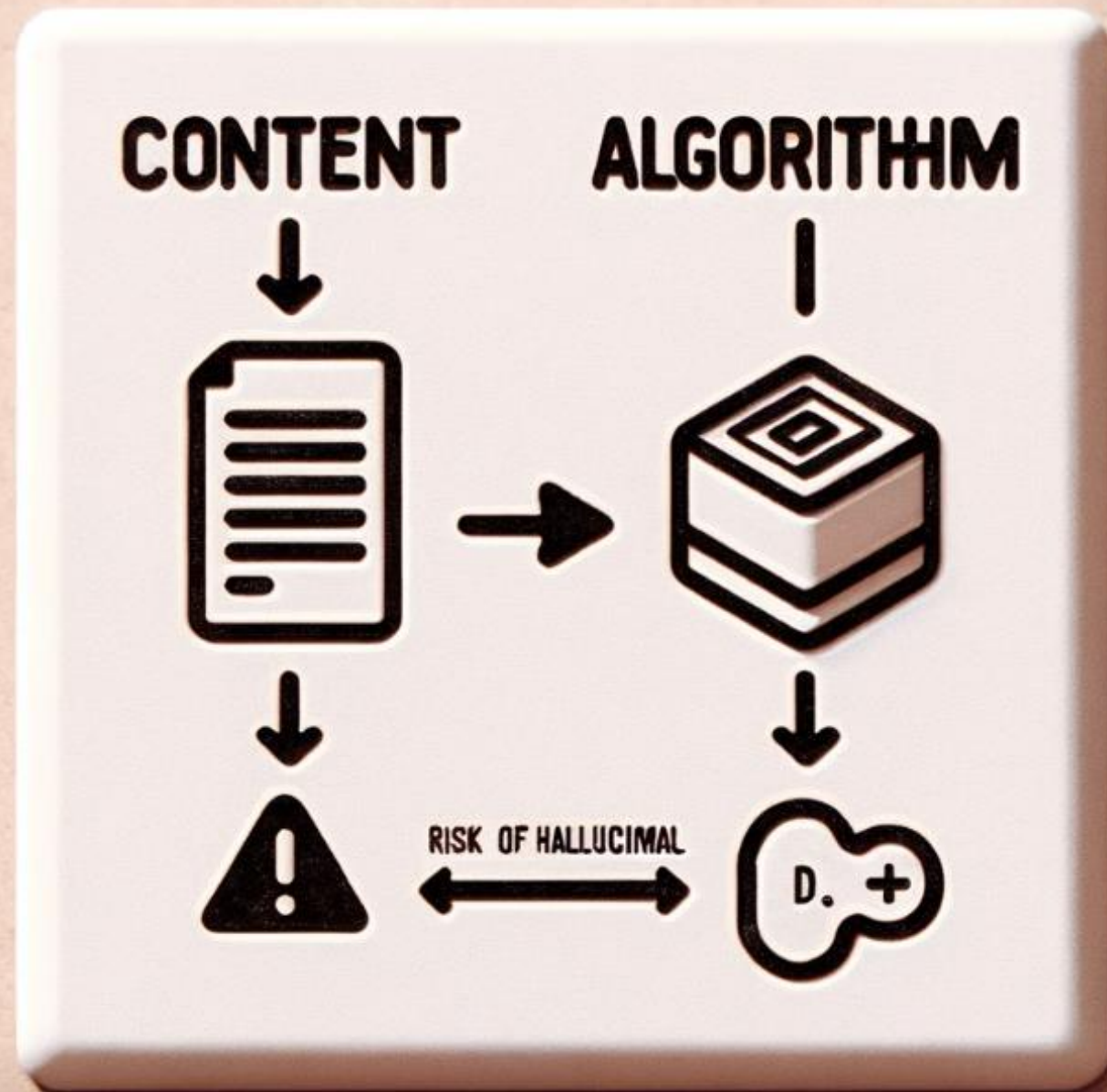


RISK OF HALLUCINAL



Make factor of paid or free AI

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- Algorithm: Hard to tell but always take note of the accuracy of the outcome
- Risk of Hallucination: AI never says "don't know!"



- Contents: Making sure they are peer reviewed, like any journals. Always check the sources of the outcome
- Algorithm: Hard to tell but always take note of the accuracy of the outcome

- Risk of Hallucination: AI never says "don't know!"

Good to use it for ideation but be cautious to use it as a reference

what are the pitfalls of using generative ai tools like chatgpt?



While generative AI tools like ChatGPT offer numerous benefits, there are also several pitfalls to be aware of. Here are some common pitfalls and how to mitigate them:

1. Accuracy and Reliability

- **Fact-Checking:** AI can generate incorrect or misleading information. Always verify facts and data from reliable sources.
- **Over-Confidence:** AI can sometimes present information with undue confidence, making it seem more reliable than it is.

2. Bias and Ethical Concerns

- **Bias in Responses:** AI models can reflect and perpetuate biases present in their training data. Be vigilant about identifying and correcting biased content.
- **Ethical Use:** Using AI to generate harmful, deceptive, or inappropriate content can lead to ethical violations. Adhere to ethical guidelines and standards.

3. Privacy and Security

- **Data Sensitivity:** Avoid sharing confidential or sensitive information with AI tools to prevent privacy breaches.
- **Data Storage:** Understand how the AI service handles and stores your data to ensure compliance with privacy regulations.

4. Dependence and Over-Reliance

- **Critical Thinking:** Relying too heavily on AI can weaken critical thinking and problem-solving skills. Use AI as a tool, not a crutch.
- **Human Oversight:** Always involve human oversight to review and refine AI-generated content.

5. Context and Understanding

- **Lack of Context:** AI may not fully understand nuanced or complex contexts, leading to inappropriate or irrelevant responses.
- **Clarification:** Be prepared to clarify or provide additional context to ensure accurate responses.

6. Creativity and Originality

- **Generic Content:** AI-generated content can sometimes be generic or lack originality. Use AI for inspiration but add your own creative touch.
- **Repetition:** AI may repeat phrases or ideas, leading to redundancy in the content.

7. Technical Limitations

- **Complex Tasks:** AI may struggle with highly complex or specialized tasks that require deep expertise or contextual knowledge.
- **Error Handling:** Be aware that AI can sometimes misinterpret queries or produce errors, requiring manual correction.

8. User Misunderstanding

- **Expectations Management:** Users may have unrealistic expectations about the capabilities of AI. Understand the limitations and scope of AI tools.
- **Training and Familiarity:** Users need to be trained on how to effectively use AI tools to avoid frustration and misuse.

9. Cost and Resource Management

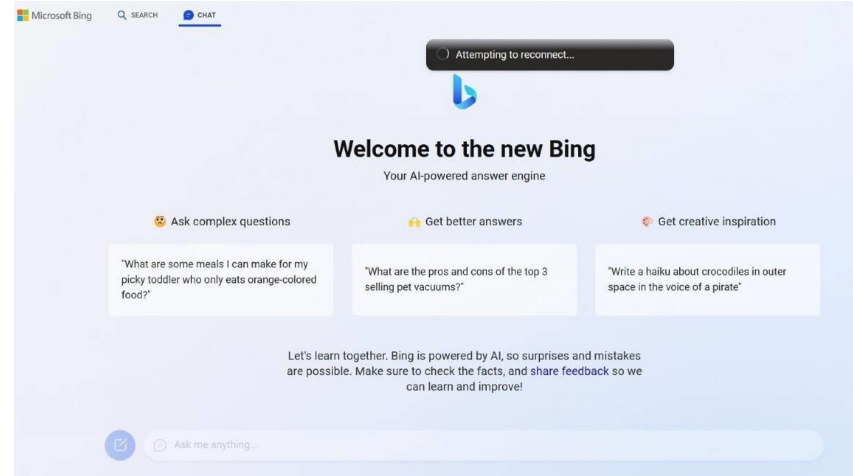
- **Resource Intensive:** Running AI models, especially large ones, can be resource-intensive and costly. Evaluate the cost-benefit ratio for your use case.
- **Scalability:** Ensure that your infrastructure can handle the demands of integrating AI tools at scale.

What else??


Search Engine +
Natural Language
Processing

Generative LLM (chatbot) +
Search

Generative LLM (chatbot)



 **OpenAI**
ChatGPT 3.5

 **OpenAI**
ChatGPT 4.0



"Tend to hallucinate!"

Search Engine + Natural Language Processing

Generative LLM (chatbot) + Search

Generative LLM (chatbot)

Elicit

Welcome to the new Elicit

Find insights across 200 million research papers with GPT-4

Elicit is an AI research assistant that helps you gather insights from across the research literature.

[Join the Waitlist](#)

Currently in private beta

Attempting to reconnect...



Welcome to the new Bing

Your AI-powered answer engine

Ask complex questions

Get better answers

Get creative inspiration

"What are some meals I can make for my picky toddler who only eats orange-colored food?"

"What are the pros and cons of the top 3 selling pet vacuums?"

"Write a haiku about crocodiles in outer space in the voice of a pirate"

Let's learn together. Bing is powered by AI, so surprises and mistakes are possible. Make sure to check the facts, and share feedback so we can learn and improve!



Ask me anything...

 **OpenAI**
ChatGPT 3.5



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Evidence-Based Answers, Faster

What does the research say about ...



Try Searching

Does creatine help build muscle?

Can mindfulness improve sleep?

Do direct cash transfers reduce poverty?

[Create An Account](#)
To Start Searching



OpenAI
ChatGPT 4.0

scite_

grammarlyGO

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16:15	End



Practical:

- Use any generative AI App like ChatGPT, Bing, Gemini, Perplexity.ai
- Ask one technical question that you know the topic well
- Identify any sign of hallucination

Time	
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ChatGPT 4 ▾



You

Enrich the script by adding some financial data or news about environmental contributed by the production of ethylene.



ChatGPT

Revised Video Abstract Script with Financial and Environmental Context for Research on Catalytic Oxidative Dehydrogenation of Ethane on IrO₂(110) Surface

[Opening Shot: Aerial views of bustling industrial complexes and serene natural gas fields.]

Narrator: "In an industry that generates over \$160 billion annually, ethylene stands as the cornerstone of modern manufacturing, from plastics to antifreeze. However, its production is energy-intensive, contributing significantly to industrial carbon emissions."

[Cut to: Animation of ethane and ethylene molecules transitioning on screen.]



[Cut to: Animation of ethane and ethylene molecules transitioning on screen.]



ChatGPT 4 ▾

This enriched script includes financial statistics and environmental impacts related to ethylene production, providing a broader context that highlights the economic and ecological importance of the research. This should help in capturing the interest of a wider audience, including industry stakeholders and environmentally-conscious viewers.



You

Where is the source for \$160 billion ethylene market.



ChatGPT

I included the figure of a \$160 billion ethylene market as a general example to provide context and enhance the script. It isn't from a specific source. For accurate and current financial data, it would be best to consult the latest market research reports or industry analysis on the global ethylene market. These are typically available through market research firms like Grand View Research, MarketsandMarkets, or industry publications that regularly update their statistics and economic reports.



Accelerate Your Research Journey

With so many tools out there, how do you know when to use what tools in order to improve your research efficiency?

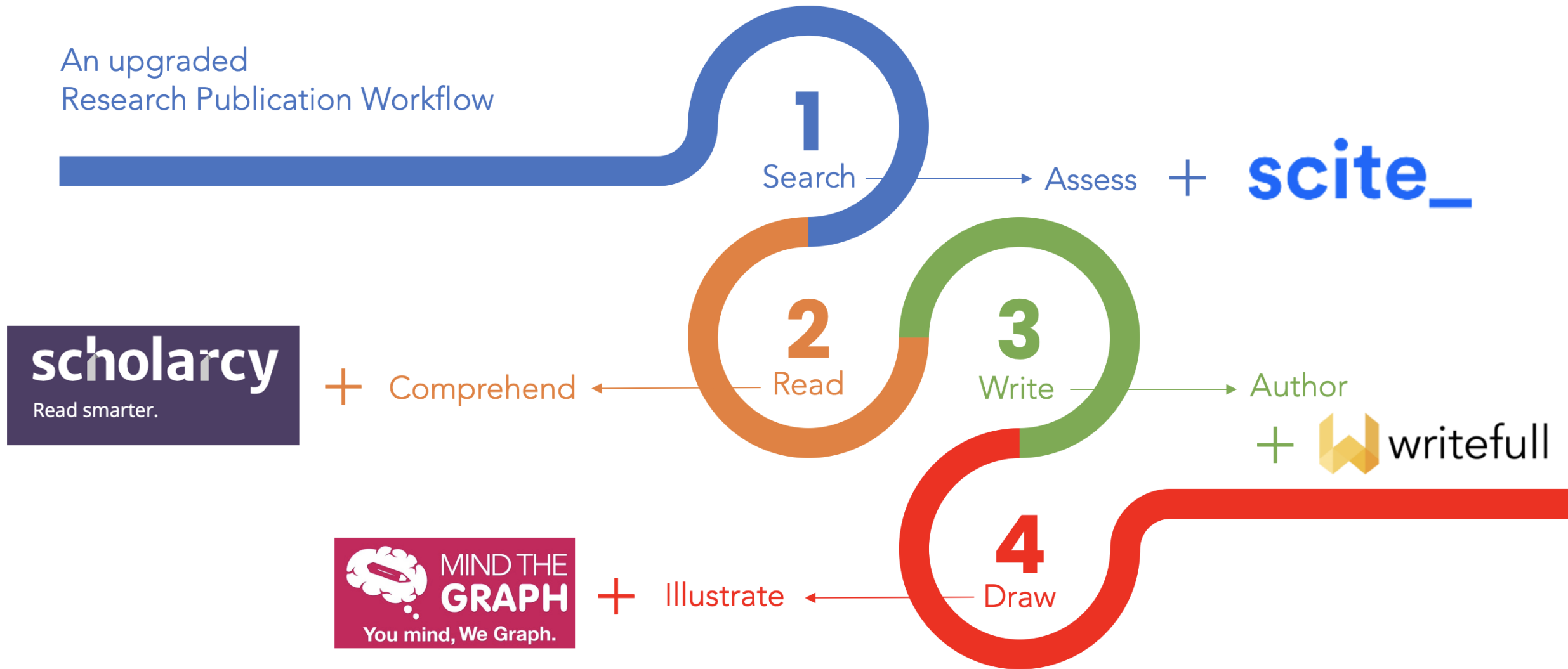
Let's take a tour on the road of research journey, and power you up with the right tools!

Your Journey Begins Here!



Where fund raising might be needed

An upgraded
Research Publication Workflow



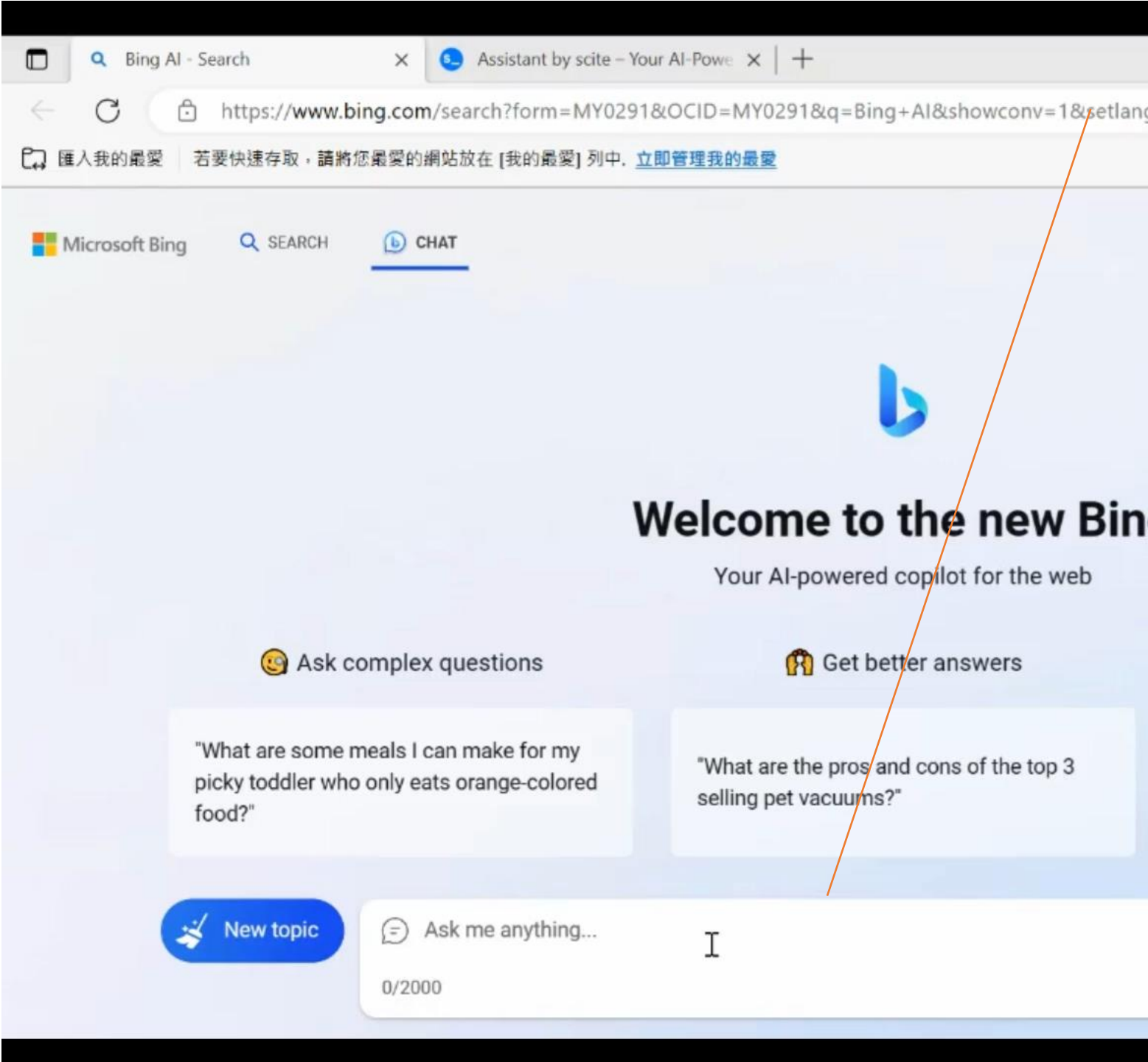
Look at the references

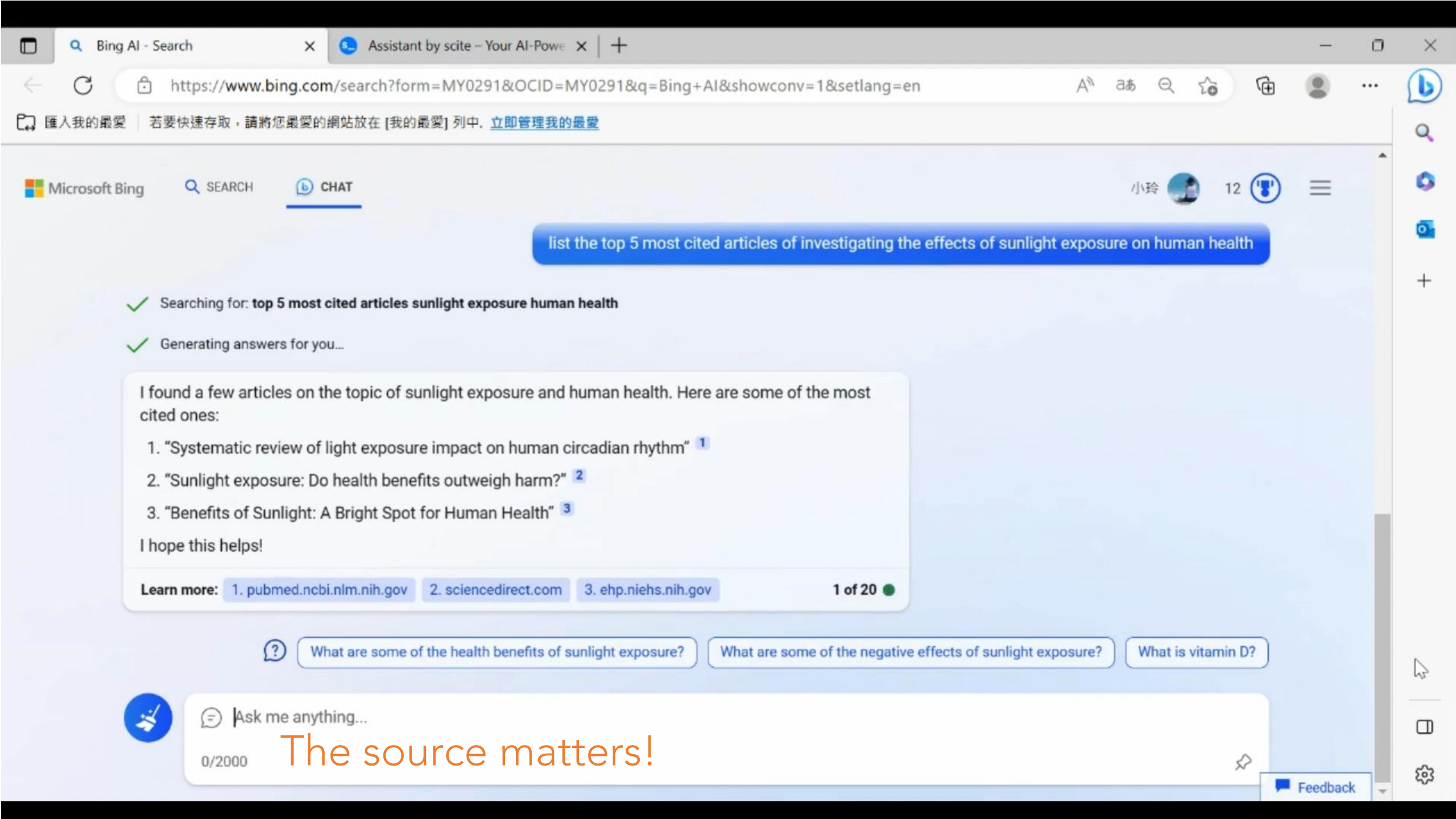
Look at the references

The same question goes to Assistant by scite

The screenshot shows the Bing AI-powered copilot interface. At the top, the Bing logo is centered above the text "Welcome to the new Bing" and "Your AI-powered copilot for the web". Below this, there are two main sections: "Ask complex questions" with a speech bubble icon and "Get better answers" with a person icon. Under "Ask complex questions", there are three example questions in light blue boxes: "What are some meals I can make for my picky toddler who only eats orange-colored food?", "What are the pros and cons of the top 3 selling pet vacuums?", and "Write a haiku about crocodiles in outer space in the voice of a pirate". Under "Get better answers", there is a text input field with the placeholder text "Ask me anything..." and a character count "0/2000". To the left of the input field is a blue button with a speech bubble icon and the text "New topic". To the right of the input field is a "Feedback" button with a speech bubble icon. The background is a light blue gradient.

List the top 5 most supported articles of investigating the effects of sunlight exposure on human health





list the top 5 most cited articles of investigating the effects of sunlight exposure on human health

✓ Searching for: **top 5 most cited articles sunlight exposure human health**

✓ Generating answers for you...

I found a few articles on the topic of sunlight exposure and human health. Here are some of the most cited ones:

1. "Systematic review of light exposure impact on human circadian rhythm" ¹
2. "Sunlight exposure: Do health benefits outweigh harm?" ²
3. "Benefits of Sunlight: A Bright Spot for Human Health" ³

I hope this helps!

Learn more: [1. pubmed.ncbi.nlm.nih.gov](https://pubmed.ncbi.nlm.nih.gov) [2. sciencedirect.com](https://sciencedirect.com) [3. ehp.niehs.nih.gov](https://ehp.niehs.nih.gov)

1 of 20



What are some of the health benefits of sunlight exposure?

What are some of the negative effects of sunlight exposure?

What is vitamin D?



Ask me anything...

0/2000

The source matters!



Feedback

A.I.-aided applications for Research Support

scite_

SEARCH: Literature discovery
ASSESS: Literature review

Lysyl Oxidase Is Essential for Hypoxia-Induced Metastasis

Janine T. Erler¹, Kevin L. Bennewith², Monica Nicolau³, Nadja Dornhöfer⁴, Christina S. Kong⁵, Quynh-Thu Le⁶, Jen-Tsan Ashley Chi⁷, Stefanie S. Jeffrey⁸, Amato J. Giaccia⁹

Abstract: Metastasis is a multistep process responsible for most cancer deaths, and it can be influenced by both the immediate microenvironment (cell-cell or cell-matrix interactions) and the extended tumour microenvironment (for example vascularization). Hypoxia (low oxygen) is clinically associated with metastasis and poor patient outcome, although the underlying processes remain unclear. Microarray studies have shown the expression of lysyl oxidase (LOX) to be elevated in hypoxic human tumour cells. Paradoxically, LO...

Expand abstract ▼
Editorial notices ▼

Search citation statements

Context, author(s), titl... 🔍

Order By: Relevance ▼

Paper Sections

<input checked="" type="checkbox"/>	Intro	208
<input checked="" type="checkbox"/>	Methods	26
<input checked="" type="checkbox"/>	Results	93
<input checked="" type="checkbox"/>	Discussion	292
<input checked="" type="checkbox"/>	Other sections	498

Citation Types

<input checked="" type="checkbox"/>	Supporting	✓	46
<input checked="" type="checkbox"/>	Mentioning	🕒	1,131
<input checked="" type="checkbox"/>	Contrasting	❓	10
<input checked="" type="checkbox"/>	Unclassified	○	17

Year Published

Cited by 1,136 publications (1,204 citation statements)

References 27 publications

Paper Section: Results

"...Treatment of established tumors with β APN (100 mg/kg/BW ip qd) reduced significant collagen cross-linking in the tumor ECM (Supplementary Figure S2). In contrast to previous studies that reported a solid reduction of growth in various tumor models [22 – 25], treatment with β APN reduced tumor growth only in the 4T1 model, while three models (MT6, EMT6, and E0771) did not respond with a change in growth rate and growth of LLC tumors was even strongly increased (Fig. 3a)...."

🕒 contrasting (Confidence: 99%) [flag classification](#)

Paper Section: Discussion

"...Previous studies have reported a solid and consistent anti-tumor effect of LOX(L) inhibition in a variety of different tumor models [23 – 25]. Baker et al have demonstrated that the proliferative effect of lysyl oxidases is caused by increased tissue stiffness and subsequently enhanced FAK signaling [28]...."

🕒 mentioning (Confidence: 90%) [flag classification](#)

LOX-catalyzed Collagen Stabilization Is a Proximal Cause for Intrinsic Resistance to Chemotherapy

Rossow, Veitl, Vorlová et al, 2018
Oncogene

33 0 38 0

[View full text](#) [Add to dashboard](#)

Paper Section: Discussion

"...Opposite to all other survival analyses, this effect was predominately due to ER positive cases, with only a weak trend in ER negative patients. In contrast to a previous report, LOX expression was not significantly associated with the overall survival, which may, at least in part, be due to the smaller number of patients in the present study [3]. The prognostic power of LOX expression was more pronounced with respect to metastasis-free survival than overall survival also in that previous study [3]...."

🕒 contrasting (Confidence: 99%) [flag classification](#)

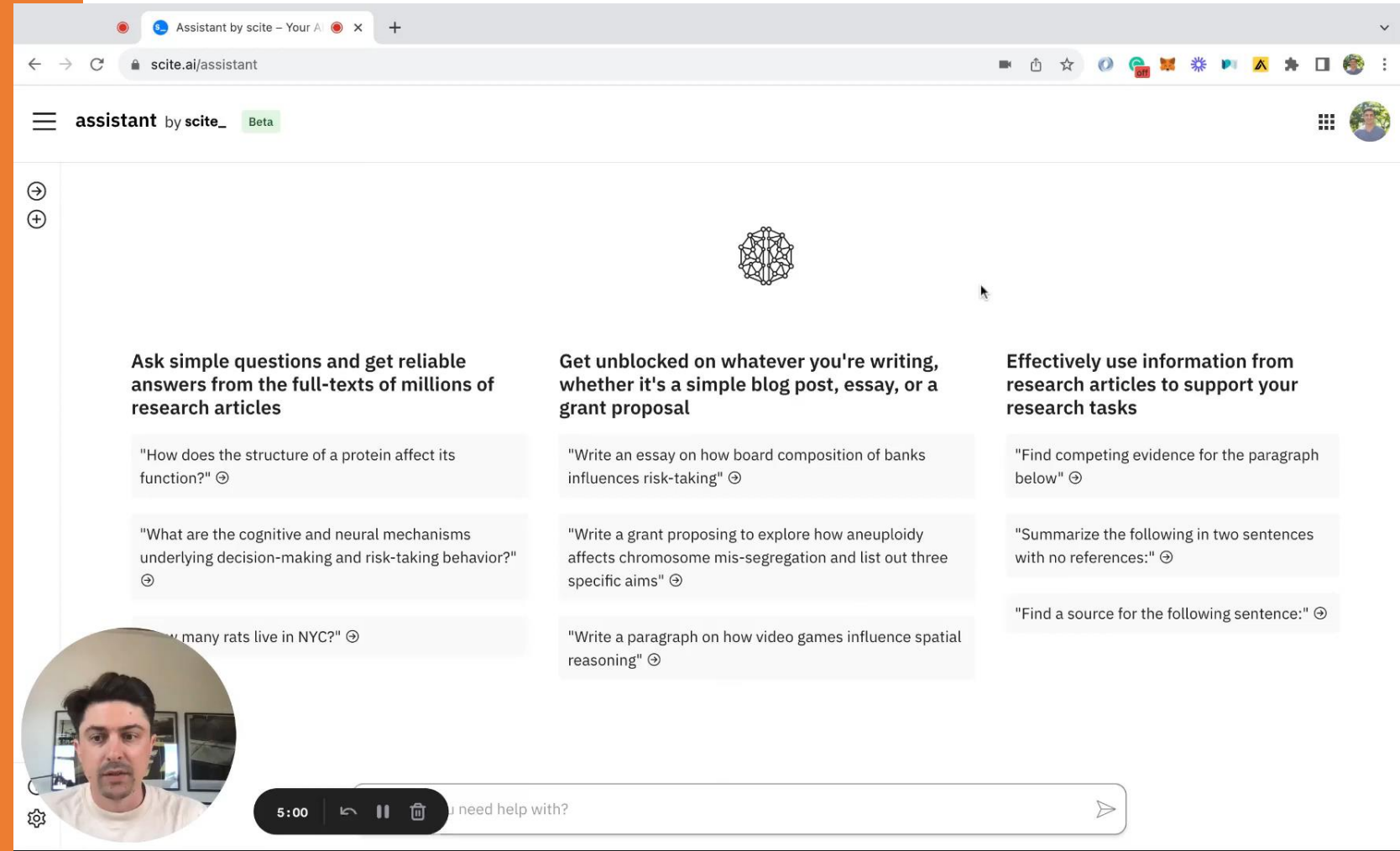
Paper Section: Discussion

"...In contrast to a previous report, LOX expression was not significantly associated with the overall survival, which may, at least in part, be due to the smaller number of patients in the present study [3]. The prognostic power of LOX expression was more pronounced with respect to metastasis-free survival than overall survival also in that previous study [3]. Finally, in multivariable Cox proportional hazards regression analyses of the DFS and MFS of the variables LOX expression, G473A genotype and ER status, LOX expression was a potent independent prognostic parameter (Table S3 and S4; see below)...."

A.I.-aided applications for Research Support

Using prompts to

- Finding evidence on certain topics
- Finding creditable sources
- Drafting introduction & grant proposals
- Get familiar with new topics




Watch the video online [here](#)

ChatGPT 4

list the top 5 most supported articles of investigating the effects of sunlight exposure on human health



I'm currently facing difficulties accessing search results. However, I can suggest a general approach to find highly regarded articles on the effects of sunlight exposure on human health:

1. **Google Scholar:** Search for articles using relevant keywords like "sunlight exposure health effects." Filter results by citation count to find the most referenced and presumably impactful papers.
2. **PubMed:** This database is excellent for medical and life sciences research. You can use similar search terms and sort results by "Best Match" or look at review articles, which often summarize the most supported research.
3. **Web of Science:** If you have access, this platform allows for refined searches and you can sort by times cited.
4. **ResearchGate:** Often researchers share their publications here, and you can see real-time statistics on engagement and citations.
5. **Academic Journals:** Journals like "The Journal of Investigative Dermatology" or "Photochemistry and Photobiology" of  publish research on the effects of UV radiation and sunlight on human health.

Gemini



list the top 5 most supported articles of investigating the effects of sunlight exposure on human health



Unfortunately, I can't directly access and rank research articles based on citations. However, I can help you find some highly-regarded resources on the topic. Here's what you can do:

1. **Search Scholar by Google:** This platform allows you to search for scholarly articles and sort them by relevance or citations. Use keywords like "sunlight exposure effects human health" and refine your search based on publication date or specific aspects (e.g., Vitamin D synthesis).
2. **Review Articles:** Look for review articles that summarize current research on sunlight and health. These articles often cite the most relevant studies in the field. You can find review articles in major medical journals like the New England Journal of Medicine or The Lancet.
3. **National Institutes of Health (NIH) Website:** The NIH website provides reliable

Home > Regional Environmental Change > Article

Original Article | Open Access | Published: 13 November 2020

A 500-year history of forest fires in Sala area, central Sweden, shows the earliest known onset of fire suppression in Scandinavia

Guilherme Alexandre Stecher Justiniano Pinto, Mats Niklasson, Nina Ryzhkova & Igor Drobyshev

Regional Environmental Change 20, Article number: 130 (2020) | Cite this article

2281 Accesses | 7 Citations | 4 Altmetric | Metrics

Abstract

The Sala fire in the Västmanland County of central Sweden that burned about 14,000 ha in 2014 has been the largest fire recorded in the modern history of Sweden. To understand the long-term fire history of this area, we dendrochronologically dated fire scars on Scots pine (*Pinus sylvestris* L.) trees (live and deadwood) to reconstruct the fire cycle and fire occurrence in the area affected by the 2014 fire. We identified 64 fire years, using a total of 378 pine samples. The earliest reconstructed fire dated back to 1113 AD. The spatial reconstruction extended over the period of 1480–2018 AD. Lower levels of fire activity (fire cycle, FC = 43

Get help from AI to
assist in
comprehending
a paper

Avoid the common mistakes →

Sections

Figures

References

References

Acknowledgments

Funding

Author information

Ethics declarations

Additional information

Rights and permissions

About this article

A.I.-aided applications for Research Support

scholarcy

COMPREHEND: Literature review
AUTHOR: Manuscript writing
PROMOTE: Research outreach

Key concepts

culturomics rDNA sequencing rRNA B. timonensis massiliensis C. saudii culturomics study MALDI-TOF laser
Assistance Publique des Hôpitaux de Marseille P. massiliensis spectrometry desorption ionization Institut de Recherche po
Institut Hospitalo-Universitaire microorganisms carbapenemase-producing Enterobacteriaceae maldi tof mass spectrometry
commensal bacteria flight mass spectrometry microbiology bacterial species rDNA infectious disease C. difficile
Anaerosalibacter massiliensis bacterial repertoire new bacterial species clinical microbiology bacteria ionization time
Pseudomonas massiliensis P. grossensis

Abstract

Culturomics has permitted discovery of hundreds of new bacterial species isolated from the human microbiome. Profiles generated by desorption/ionization time-of-flight (MALDI-TOF) mass spectrometry have been added to the mass spectrometer database used in clinical microbiology. We retrospectively collected raw data from MALDI-TOF mass spectrometry used routinely in our laboratory in Marseille, France, during the study period and analyzed 16S rDNA sequencing results from misidentified strains. During the study period, 744 species were identified from clinical specimens that were species first isolated from culturomics. This collection involved 105 clinical specimens, accounting for 98 patients. In 64 cases, isolates were considered clinically relevant. MALDI-TOF mass spectrometry was able to identify the species in 95.2% of the 105 specimens. While only a small fraction of the bacterial repertoire associated with humans, culturomics studies also enlarge the spectrum of prokaryotes involved in infectious diseases.

Scholarcy highlights

- Culturomics has permitted discovery of hundreds of new bacterial species isolated from the human microbiome
- The creation of new spectra enabled us to increment our MALDI-TOF mass spectrometry database used for clinical microbiology with bacterial species first isolated as a part of culturomics studies and improving the accuracy of diagnosis of infectious diseases
- We identified 744 unique bacterial species correctly using MALDI-TOF mass spectrometry
- Routine Identification of Species Isolated as Part of Culturomics Studies Among the 351,937 bacterial identifications performed during the study period, we identified species first isolated from culturomics studies in 105 clinical specimens, accounting for 98 patients
- This work constitutes the proof of concept that exploration of the repertoire of commensal bacteria enables identification of bacterial species in clinical microbiology
- Identification of 9 strains using 16S rDNA sequencing, accounting for 5 species, confirmed the initial recognition by MALDI-TOF mass spectrometry (Table 2). These results strengthen our belief that identifying commensal microbes provides a valuable contribution to clinical microbiology by the decrease in the number of unidentified colonies by MALDI-TOF mass spectrometry over time (Figure)

A.I.-aided applications for Research Support



AUTHOR: Manuscript proofreading

The screenshot displays the Writefull application interface. At the top is a dark blue header bar with navigation tabs: 檔案 (File), Home, 插入 (Insert), 設計 (Design), 版面配置 (Layout), 參考資料 (References), 郵件 (Mail), 校閱 (Review), 檢視 (View), 說明 (Help), and Writefull. Below the header is a toolbar with icons for Sign Out, Full Edit Mode, Check Document, Check Paragraph, Revise with Track Changes, Sentence Palette, Language Search, Title Generator, Paraphraser, and About Writefull. The main workspace is divided into two panes. The left pane shows a manuscript titled "Fire Effects on Forest Composition: A Case Study of California" with an "Abstract" section. The text in the abstract describes a study on the effect of dryness and fire on forest composition in California. The right pane is a sidebar titled "Writefull" showing a list of suggestions for improving the text. The first suggestion highlights the phrase "great quantity of wildfires over the last years" and offers the alternative "large number of wildfires in recent years". The second suggestion highlights "has been carefully chosen and its composition has been carefully studied." and offers the alternative "has been carefully studied." At the bottom of the sidebar are buttons for "ACCEPT" and "DISMISS". The status bar at the bottom of the application shows "第 1 頁, 共 1 頁" (Page 1 of 1), "377 個字" (377 words), "英文 (美國)" (English (US)), and "協助工具: 一切準備就緒" (Tools: All ready).

Academic English Proofreading and Suggestion using Deep Learning Model

Proofreading the manuscript

Academic writing guidance

One-click language checks

Watch the video [here](#)



Automate your scientific writing.

Generate a new title
for the published
paper

Original title:

A 500-year history of forest fires in Sala area, ce
earliest known onset of fire suppression in Scandinavia

ChatGPT generated title:

Reconstructing the fire history of Sala, Swedan: early onset of fire
suppression and its impact on fire occurrence and climate drivers

WriteFull generated title:

Dendrochronological analysis of the Sala fire in the Vastmandland
Country, Central Swedan`

Result

Original title:

A 500-year history of forest fires in Sala area, central Sweden, shows the earliest known onset of fire suppression in Scandinavia

General Method

ChatGPT generated title:

Reconstructing the fire history of Sala, Sweden: early onset of fire suppression and its impact on fire occurrence and climate drivers

Specific Method

WriteFull generated title:

Dendrochronological analysis of the Sala fire in the Vastmandland Country, Central Sweden`

Generate a new title for another paper

Original title:

A stochastic numerical approach for a class of perturbed system

ChatGPT generated title:

Neuro-evolutionary scheme for solving singularly perturbed boundary value problems: utilizing feed-forward artificial neural networks and particle swarm optimization with interior-point algorithm

WriteFull generated title:

A neuro-evolutionary method for solving singular singularly perturbed boundary value problems

Method

Original title:

A stochastic numerical approach for a class of singular singularly perturbed system

Solving Something

ChatGPT generated title:

Neuro-evolutionary scheme for solving singularly perturbed boundary value problems: utilizing feed-forward artificial neural networks and particle swarm optimization with interior-point algorithm

Method-Solving a Problem

WriteFull generated title:

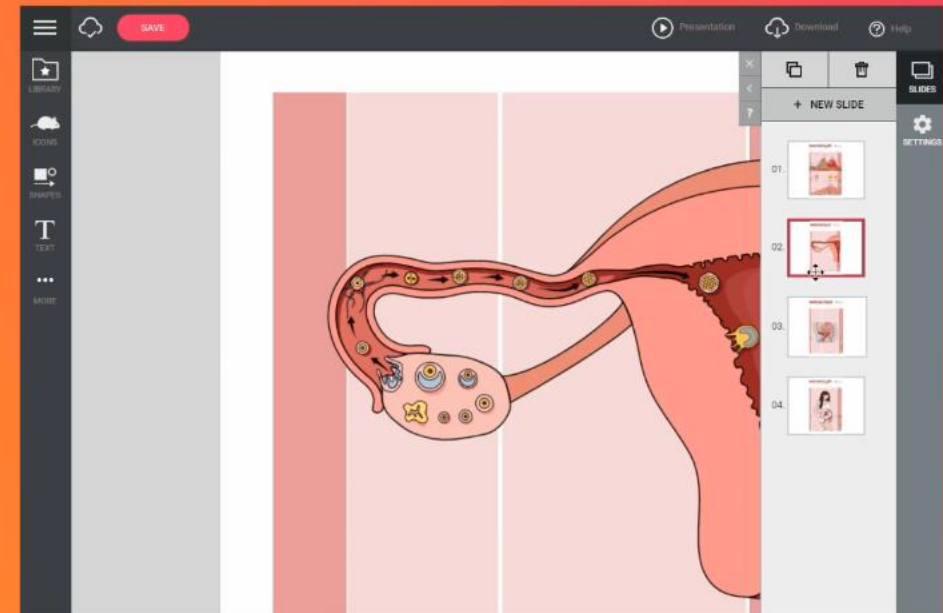
A neuro-evolutionary method for solving singular singularly perturbed boundary value problems

A.I.-aided
applications for
Research Support



ILLUSTRATE: Graphical abstract
PROMOTE: Research outreach

A free infographic maker
for medical doctors
and scientists.



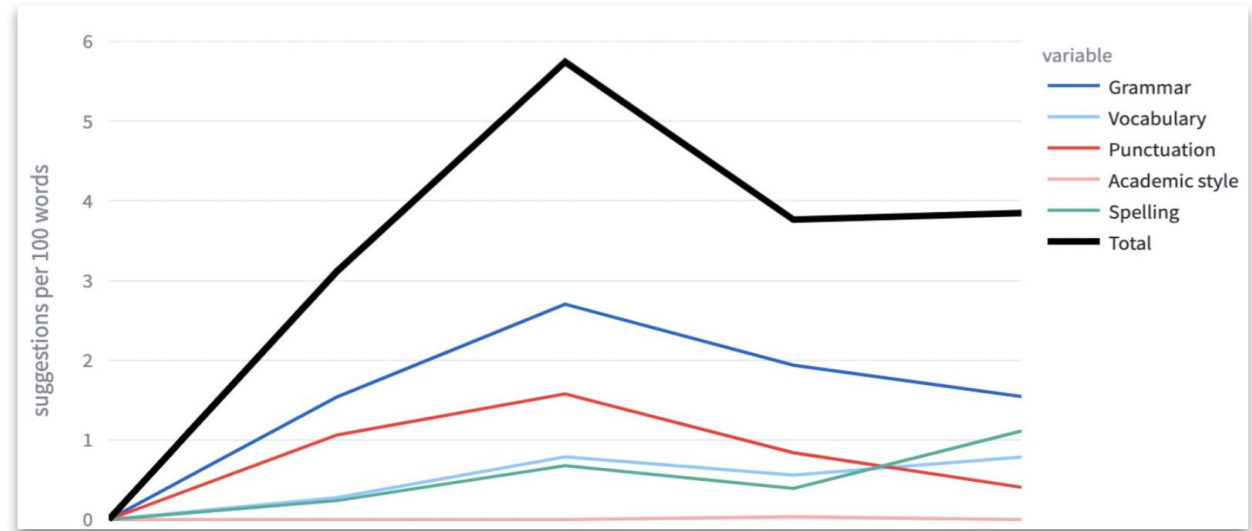
Things to take note about using AI tools

1. Check the **sources** > Literature review
2. Understand your preferred **workflow** > Comprehending a paper
3. Take note of the **machine learning model** as the tool depends on its training > Generating options

Things to take note about

1. Check the **sources** > Literature review
2. Understand your preferred **words**
3. Take note of the **machine** training > Generating suggestions
4. Look for analytics > Helping users to learn and to make a better decision
5. Check the T&C > Privacy
6. Understand the difference between AI-generated contents versus human-written contents > Detector
7. Check the new policies > About using AI tools, specifically ChatGPT in publishing or acknowledgement

Dashboard - monitor academic language skill

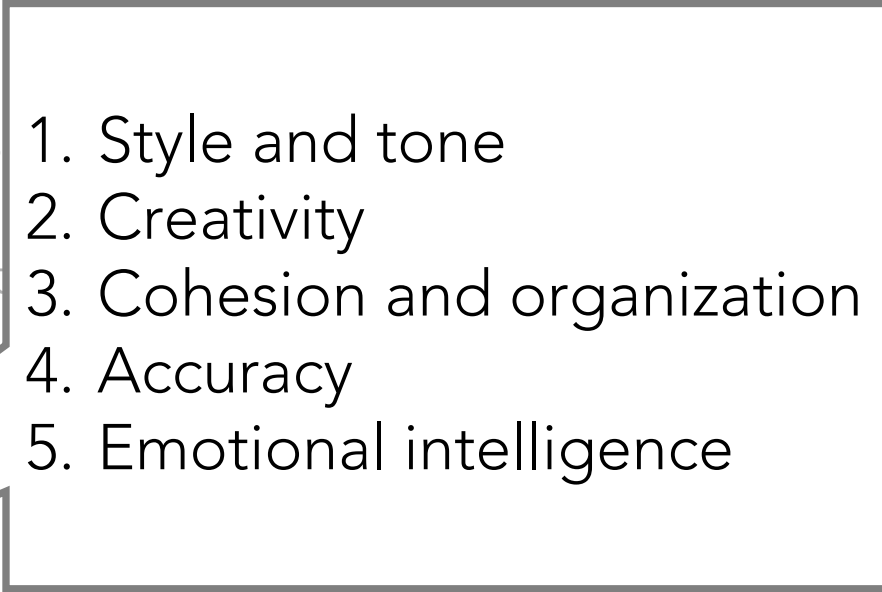


Things to take note about using AI tools

1. Check the **sources** > Literature review
2. Understand your preferred **workflow** > Comprehend
3. Take note of the **machine learning model** as the training > Generating options
4. **Look for analytics > Helping users in and to m**
5. **Check the T&C > Privacy**
6. **Understand the difference between AI-generated contents versus human-written contents > Detector**
7. **Check the new policies > About using AI tools, specifically ChatGPT in publishing or acknowledgement**

	Can they use your data?
Google Docs	yes
Microsoft Editor	yes
Grammarly	yes
Writefull	no
Quillbot	yes
DeepL	yes for Free, no for Pro
ChatGPT / OpenAI	yes

Things to take note about using AI tools

1. Check the **sources** > Literature review
 2. Understand your preferred **workflow** > Comp
 3. Take note of the **machine learning model** as t
training > Generating options
 4. **Look for analytics > Helping users to le**
 5. **Check the T&C > Privacy**
 6. **Understand the difference between AI-generated contents versus human-written contents > Detector**
 7. **Check the new policies > About using AI tools, specifically ChatGPT in publishing or acknowledgement**
- 
1. Style and tone
 2. Creativity
 3. Cohesion and organization
 4. Accuracy
 5. Emotional intelligence

Things to take note about using AI to

1. Check the **sources** > Literature review
2. Understand your preferred **workflow** > Comprehension
3. Take note of the **machine learning model** as the training > Generating options
4. Look for analytics > Helping users to learn and understand
5. Check the T&C > Privacy
6. Understand the difference between AI-generated and human-written contents > Detector
7. Check the new policies > About using AI tools for research publishing or acknowledgement

The rat with the big balls and the enormous penis – how Frontiers published a paper with botched AI-generated images



eliesbik

February 15, 2024

Artificial Intelligence, Easy Journals, Image Concerns, Peer Review Fail

Frontiers, journals,
Midjourney, peer review,
publishing, rat, research,
science, stem cells, testes


A [review article](#) with some obviously fake and non-scientific illustrations created by Artificial Intelligence (AI) was the talk on X (Twitter) today.

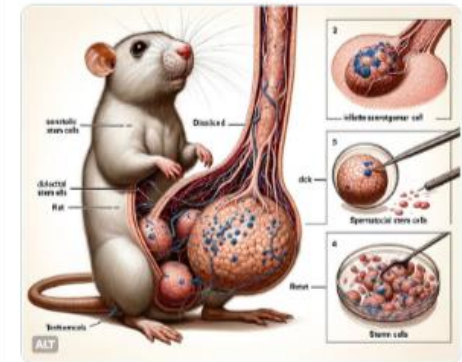
The figures in the paper were generated by the AI tool Midjourney, which generated some pretty, but nonsensical, illustrations with unreadable text.

It appears that neither the editor nor the two peer reviewers looked at the figures at all. The paper was peer-reviewed within a couple of weeks and published two days ago.

Dear readers, today I present you: the rat with the enormous family jewels and the dislocttal stem ells.



Dr CJ Houldcroft  @DrCJ_Houldcroft · 3h
Erm, how did Figure 1 get past a peer reviewer?!
[frontiersin.org/articles/10.3389/fpsyg.2021.684111](https://doi.org/10.3389/fpsyg.2021.684111) H/T @aero_anna



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♥ 2.88

slat 572K

□ □

Tweet by Dr. Houldcroft discussing Figure 1 from the paper. Source: https://twitter.com/DrCJ_Houldcroft/status/1758111493181108363

Time	
13:30	Opening & Unlocking the World of A.I.
13:50	Hands-on
14:00	Introduction to A.I. in Research Workflow
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15:45	Discussion: "Empowering librarians for A.I. adoption!"
16:15	End



Practical:

- Should ChatGPT be the right tool to use when conducting following research tasks, and why?
 - Literature review
 - Reference checking and formatting
 - Proofreading unpublished manuscripts
 - Plagiarism checking
 - Data analysis
 - Questionnaire design
 - Graphic design

Figure 1: When is it safe to use ChatGPT?⁵

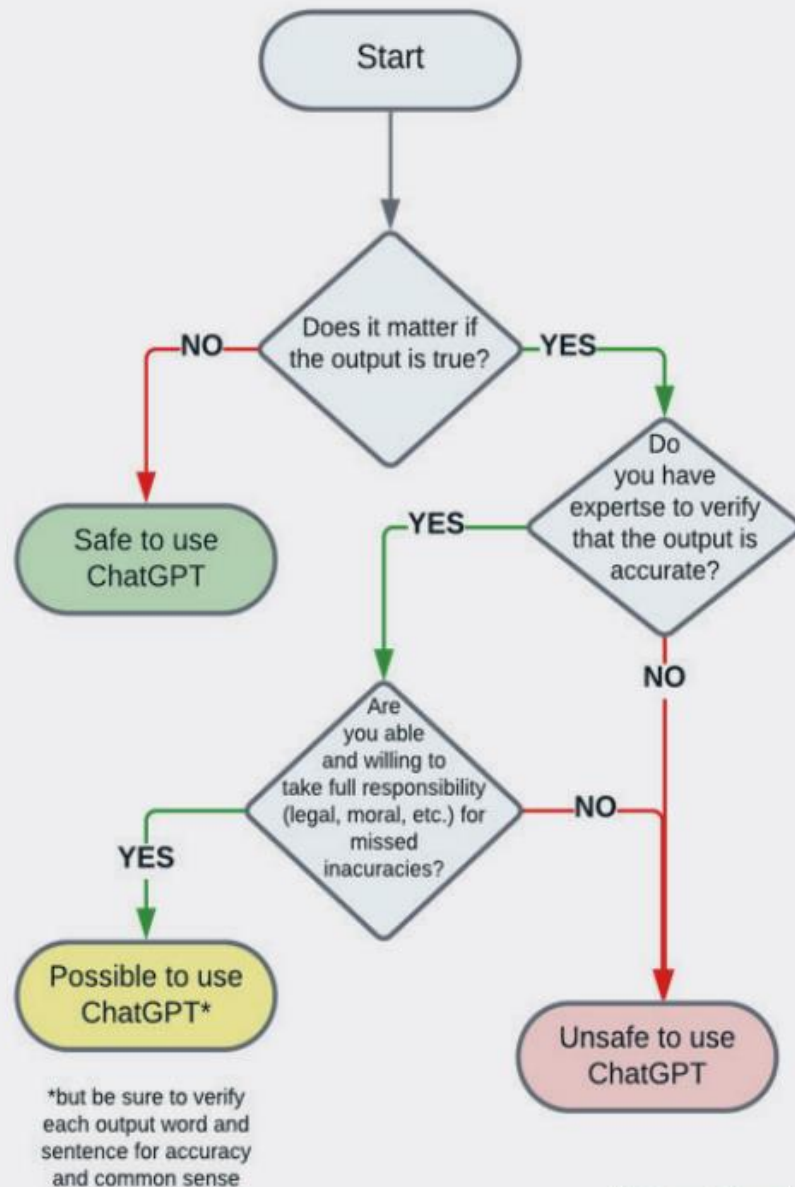
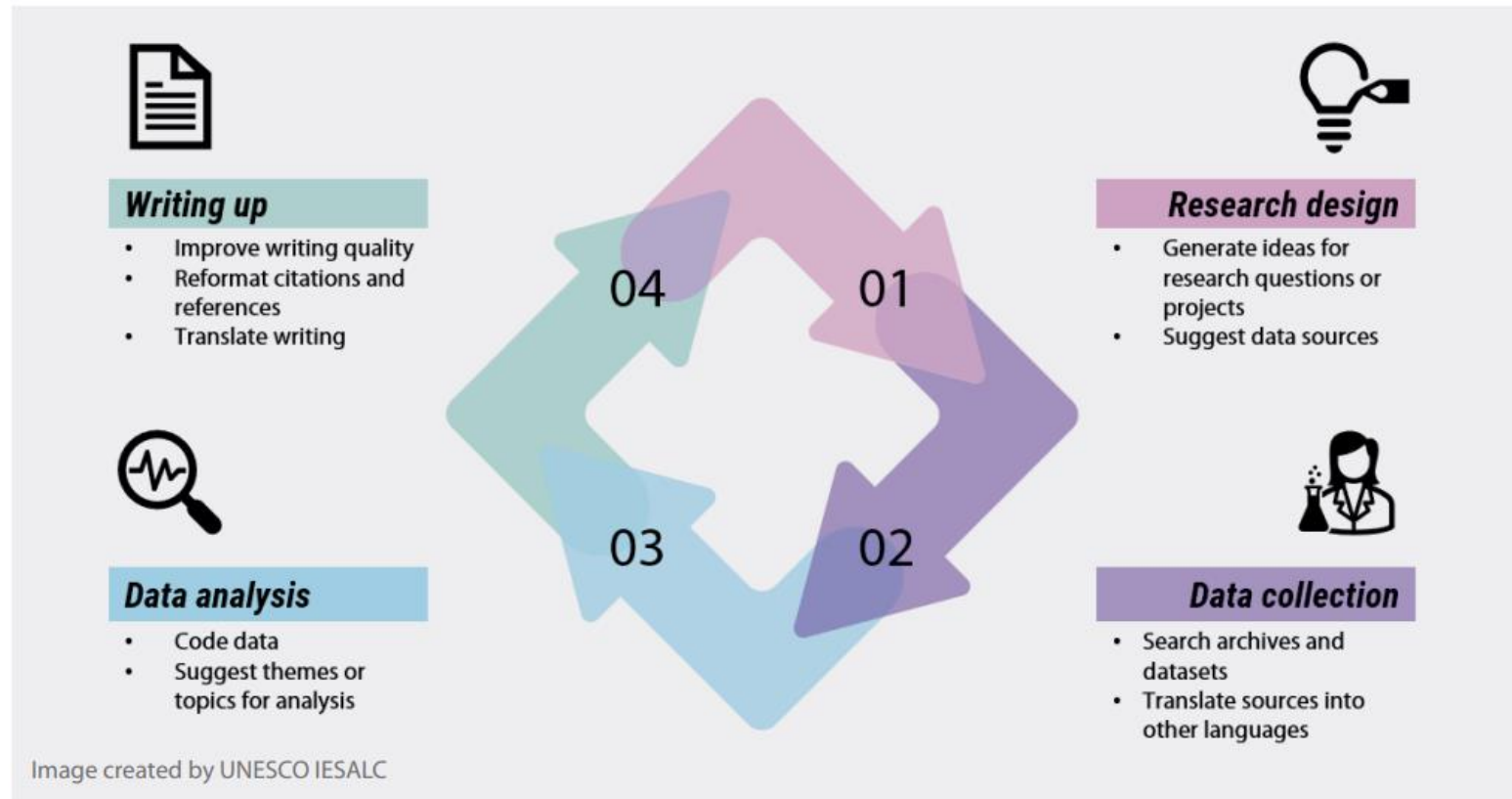


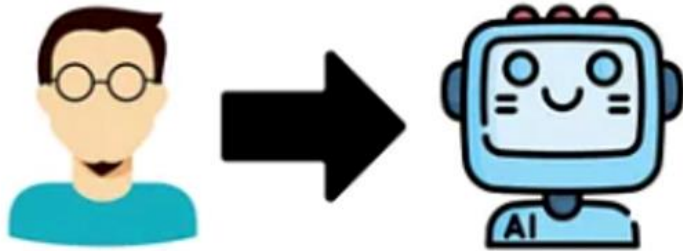
Figure 3: Possible uses of ChatGPT in the research process



Source: [ChatGPT and Artificial Intelligence in Higher Education Quick Start Guide](#)

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Automation



Replace human intelligence with artificial intelligence.

Three risks of overreliance on AI

1. Diminish critical thinking
2. Originality issues and falsification
3. Biases and misinformation

Augmentation



Augment human intelligence with artificial intelligence.

Three human constraints without AI

1. Limited lifespan
2. Learning rate
3. Social network sizes

Google search exposes academics using ChatGPT in research papers

Updated on: November 15, 2023 12:53 PM



Paulina Okunytė, Journalist

7. FUTURE SCOPE

As an AI language model, I cannot predict the future. However, here are a few potential future research directions for topology optimization of steering knuckles:

1. Integration with additive manufacturing technologies: Topology optimization can be integrated with additive manufacturing (3D printing) technologies. In the future, the optimization can be directly integrated with various manufacturing processes to produce the optimized structure directly.

IJFMR23022503

[Volume 5, Issue 2, March-April 2023](#)

Results and discusses the performance of proposed methodology

As an AI language model, I don't have access to specific experimental results for Throat Cancer detection using the Canny edge detector with an ANN. However, I can provide you with a general discussion of the expected performance and potential outcomes based on similar approaches and techniques in medical image analysis.

The performance of Throat Cancer detection using the Canny edge detector with an ANN can be evaluated based on various metrics such as accuracy, sensitivity, specificity, precision, F1-score, and the area under the ROC curve (AUC-ROC).

Eur. Chem. Bull. 2023, 12(Special Issue 4), 10539-10549

10544

"Throat Cancer detection using canny edge detector with ANN" Research published in European Chemical Bulletin,12(4):10539-10549 | Image by Cybernews

Retraction Watch

Tracking retractions as a window
into the scientific process

PAGES

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[Retracted coronavirus \(COVID-19\) papers](#)

[Retraction Watch Database User Guide](#)

[Retraction Watch Database User Guide Appendix A: Fields](#)

[Retraction Watch Database User Guide Appendix B: Reasons](#)

Journal taking ‘corrective actions’ after learning author used ChatGPT to update references

An interdisciplinary journal says it will take “corrective actions” on a paper following a thorough investigation on a paper for which one author used ChatGPT to update the references.



Krithika Srinivasan, an editor of *Environment and Planning E: Nature and Space* and a geographer at the University of Edinburgh, in Scotland, confirmed to *Retraction Watch* her journal is finalizing what actions need to be taken. After the probe concluded, Srinivasan says she submitted her recommendations to Sage, the journal’s publisher, who will take actions in line with their policy.

What’s clear from the probe, she says, is that “none of the incorrect references in this paper were ‘fabricated’ in the sense of being made up or false.” She notes that the original manuscript was submitted to the journal with the correct references but “the errors were generated when one of the other authors (without the knowledge of the submitting author) used chatGPT (instead of regular referencing software) to insert the citations and reference list.”



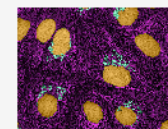
Science funding agencies say no to using AI for peer review

Concerns include confidentiality, accuracy, and “originality of thought”

14 JUL 2023 • 4:25 PM ET • BY [JOCELYN KAISER](#)

NIH and other funding agencies, however, are putting the kibosh on the approach. On 23 June, NIH **banned** the use of online generative AI tools like ChatGPT “for analyzing and formulating peer-review critiques”—likely spurred in part by a **letter** from Siegle, who is at the University of Pittsburgh, and colleagues. After the conference they warned the agency that allowing ChatGPT to write grant reviews is “a dangerous precedent.” In a similar move, the Australian Research Council (ARC) on 7 July **banned** generative AI for peer review after learning of reviews apparently written by ChatGPT.

Other agencies are also developing a response. The U.S. National Science Foundation has formed an internal working group to look at whether there may be appropriate uses of AI as part of the merit review process, and if so what “guardrails” may be needed, a spokesperson says. And the European Research Council expects to discuss AI for both writing and evaluating proposals.



21 MAY 2024 | BY JEFFREY BRAINARD

Hundreds of cancer papers mention cell lines that don't seem to exist



20 MAY 2024 | BY JON COHEN

Companies start work on bird flu vaccines for cows—despite major hurdles



20 MAY 2024 | BY MARTIN ENSERINK

Report slams Dutch archaeologist couple for intimidation, abuse of power, and theft of human remains

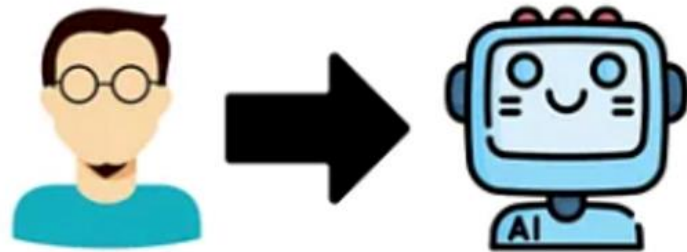
[VIEW MORE >](#)

What constitutes cheating?

1. Plagiarism
2. Fabrication
3. Falsification
4. Misrepresentation
5. Data Theft

What constitutes cheating?

Automation



Replace human intelligence with artificial intelligence.

1. Plagiarism
2. Fabrication
3. Falsification
4. Misrepresentation
5. Data Theft

Risk of AI-generated work

.... let say you present such work in a conference

Your audience will ask about

- Authenticity
- Originality
- Citations & References
- Reproducibility

FUTURE PERFECT SCIENCE PUBLIC HEALTH

Who fakes cancer research? Apparently, lots of people.

Faked cancer data is the latest sign of science's fraud problem.

By Kelsey Piper | Mar 1, 2024, 9:00am EST

f t SHARE



Boston Globe via Getty Images

Kelsey Piper is a senior writer at Future Perfect, Vox's effective altruism-inspired section on the world's biggest challenges. She explores wide-ranging topics like climate change, artificial intelligence, vaccine development, and factory farms, and also writes the Future Perfect newsletter.

FUTURE PERFECT

Finding the best ways to do good.

Last summer, I covered the saga of Harvard Business School's Francesca Gino, who was credibly accused of flagrantly fabricating data in at least four of her published studies. She was caught when some data sleuths on the internet — investigating research misconduct in their free time — found discrepancies in the data for her papers and investigated further.

They eventually raised their concerns with Harvard, which investigated and ultimately requested retractions of the papers in question. (Gino filed a lawsuit against Harvard and

AD

Most Read

- 1 Israel and Iran's conflict enters a new, dangerous phase
- 2 It's impossible to be neutral about Taylor Swift
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- 4 Tell the truth about Biden's economy

Good citation practices with AI tools

- Cite as you write
- Cite the originals or primary sources
- Cite regardless it's paraphrasing or direct quote
- Cite your own work, appropriately
- Attribute to all types of media used (images, graphs, tables, audios, and videos)
- Implement disclaimers
- Understand the fair use doctrine
- And always keep a list of reference list, and stay updated!

Starting to use disclaimers



NOVEMBER 4, 2022

Based on true events: docudramas, disclaimers, and defamation

By: Melissa Bergmann, Senior Editor

In recent years, the “docudrama” genre has grown in popularity. A docudrama is a television series or film featuring dramatized depictions of real events. This genre includes series such as “Dahmer,” “Inventing Anna,” and “The Act.” Coupled with the recent growth in popularity in this genre is growth in defamation lawsuits filed by the real-life individuals depicted in these movies and television shows.

A defamation suit threatens HBO’s 2022 docudrama “Winning Time: The Rise of the Lakers Dynasty.” The series received rave reviews from audiences and critics, but actual members of the 1980’s Los Angeles Lakers basketball team, nicknamed the “Showtime Lakers,” are less than impressed. In a letter sent to HBO by his attorney, Jerry West (former Lakers basketball player, coach, and general manager) called his depiction in “Winning Time” a “baseless and malicious assault on [his] character.” While West has yet to file suit against HBO, the letter alludes to possible false light and defamation claims, which West

Categories

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Author who inspired Mean Girls threatens legal action nearly two decades after its premiere

Legal rumors: can Liam Hemsworth successfully sue Miley Cyrus for defamation over “Flowers”?

Ye West’s legal issues amid anti-semitism controversy

Netflix is done being chill: streaming site cracks down

The story, all names, characters, and incidents portrayed in this production are fictitious. No identification with actual persons (living or deceased), places, buildings, and products is intended or should be inferred.

Example: Dr. Pat Jones works with another faculty member as part of his teaching at the local university as an approved outside activity. He and the other faculty member jointly prepare an article for publication in a scientific journal. He may use his official Government title but it **must** be accompanied by the following **disclaimer**, prominently placed so readers see it: ***Dr. Jones contributed to this article in his personal capacity. The views expressed are his own and do not necessarily represent the views of the National Institutes of Health or the United States Government.***

AAAS (Science)

The *Science* journals have now adapted our editorial policies on [image and text integrity](#) to include the following:

Artificial intelligence (AI). AI-assisted technologies [such as large language models (LLMs), chatbots, and image creators] do not meet the *Science* journals’ criteria for authorship and therefore may not be listed as authors or co-authors, nor may sources cited in *Science* journal content be authored or coauthored by AI tools. Authors who use AI-assisted technologies as components of their research study or as aids in the writing or presentation of the manuscript should note this in the cover letter and in the acknowledgments section of the manuscript. Detailed information should be provided in the methods section: The full prompt used in the production of the work, as well as the AI tool and its version, should be disclosed. Authors are accountable for the accuracy of the work and for ensuring that there is no plagiarism. They must also ensure that all sources are appropriately cited and should carefully review the work to guard against bias that may be introduced by AI. Editors may decline to move forward with manuscripts if AI is used inappropriately. Reviewers may not use AI technology in generating or writing their reviews because this could breach the confidentiality of the manuscript.

AI-generated images and other multimedia are not permitted in the *Science* journals without explicit permission from the editors. Exceptions may be granted in certain situations—e.g., for images and/or videos in manuscripts specifically about AI and/or machine learning. Such exceptions will be evaluated on a case-by-case basis and should be disclosed at the time of submission. The *Science* journals recognize that this area is rapidly developing, and our position on AI-generated multimedia may change with the evolution of copyright law and industry standards on ethical use.

<https://www.science.org/content/blog-post/change-policy-use-generative-ai-and-large-language-models>

Journal of Medical Internet Research

Table 1. Author’s responsibilities when using generative artificial intelligence (AI) in preparing a manuscript.

Guiding principle	Author’s responsibilities
Accountability	<ul style="list-style-type: none">Be accountable for the content of AI-generated comments submitted in the manuscript. For example, AI-generated statements should have accompanying citations where appropriate and be fact-checked for accuracy, and generated references should be checked to ensure that they have not been hallucinated.Do not list generative AI as a coauthor.
Transparency	<ul style="list-style-type: none">If generative AI was a part of the study design, include appropriate methodological detail in the Methods section of a manuscript. Describe how generative AI was used in the conduct of the scientific work in sufficient detail for a peer-reviewed publication.If generative AI was used to generate manuscript content, then state clearly in the Acknowledgments section how and where generative AI was used. This may include but is not limited to writing or creating text, figures, or other content for scientific publication. Disclose which generative AI tool was used by attesting to its use, such as stating, “I conducted this review with the assistance of [ProductName, Version, from CompanyName, Year].”If no generative AI was used, state in the cover letter of the submission the following: “The author(s) attest that there was no use of generative artificial intelligence (AI) technology in the generation of text, figures, or other informational content of this manuscript.”
Confidentiality	<ul style="list-style-type: none">Authors use generative AI at their own risk. Understanding the terms of use of any generative AI is recommended to understand how the content of prompts may be reused by the generative AI and the company that created it.

<https://support.jmir.org/hc/en-us/articles/13387268671771-Do-you-allow-the-use-of-ChatGPT-or-other-generative-language-models-and-how-should-this-be-reported>

Don't do the following

- Claiming AI-generated work as your own
- Rephrasing existing contents
- Concealing AI's role
- Failing to cite or citing incorrectly

What to do when accused of AI cheating

- Stay calm and re-check all the facts and evidences
- Prove yourself by focusing on your best practices

About 88,700 results (0.34 seconds)

' 2 min. British pop phenom Ed Sheeran **did not plagiarize Marvin Gaye's "Let's Get It On" when composing his 2014 hit "Thinking Out Loud,"** a US jury ruled Thursday, May 4. The English musician said he was "very happy" with the decision but "unbelievably frustrated that baseless claims like this" even make it to court.

4 May 2023



Le Monde.fr

<https://www.lemonde.fr> › Culture › Music

Ed Sheeran wins plagiarism lawsuit over his song 'Thinking ...



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16:15	End



Discussion

Enabling librarians for A.I. adoption

1. What's the difference between A.I. adoption v.s. A.I. adaptation
2. What's your biggest challenge in using A.I. to support research?



Wrap Up



Feel free to fill in the Feedback form!