Annex 17. Do's and Don'ts - Artificial Intelligence in the ECDC Fellowship Training Programme

Working document version 01

The ECDC Fellowship Programme is a two-year competency-based training with two paths: the field epidemiology path (EPIET) and the public health microbiology path (EUPHEM). Both paths provide training and practical experience using a "learning by doing" approach in acknowledged training sites across European Union (EU) and European Economic Area (EEA) member states. While Generative Artificial Intelligence (Gen AI) and large language model tools can enhance learning experience and help address public health challenges, we must establish clear boundaries for Gen AI use in this educational context. Fellows must therefore critically evaluate whether Gen AI is appropriate for each task. For some assignments and module activities, you will be explicitly asked not to use Gen AI tools. Developing fundamental epidemiological skills requires dealing with challenges through your own critical thinking and problem-solving abilities.

Overreliance on Gen AI can prevent full comprehension of essential concepts. The process of encountering obstacles, working through them, and developing your own solutions is crucial for building the core competencies required of epidemiologists and public health microbiologists.

These do's and don'ts provide practical guidance and support for navigating various programme tasks while developing your professional capabilities. We expect all fellows to respect these guidelines when Gen AI use is restricted.

Do's

Follow institutional policies: always comply with your institution's Al use policies. Seek clarification if unsure.

Ensure data privacy: use only publicly available or non-sensitive data (eg that does not risk identifying individuals or disclose internal information).

Maintain transparency: disclose when AI tools are used in reports, presentations, or publications.

Critically evaluate Al outputs: check Al-generated content for accuracy, bias, and relevance. Always validate information.

Use Al for efficiency: leverage Al to streamline tasks like drafting or summarizing but retain personal judgment.

Attribute sources: acknowledge AI assistance and cite sources properly.

Promote ethical use: use Al in alignment with ethical standards like fairness and non-discrimination.

Disable data sharing for Al model training (this prevents the data from being exposed in public domains).

Don't

Don't use Al for decisions: avoid relying, solely, on Al for decisions that impact public health or research.

Don't share sensitive data: never input confidential, personal, or proprietary data into Al tools.

Don't assume accuracy: All outputs can be biased or incorrect.

Don't overuse AI: avoid excessive reliance on AI, especially for critical or creative tasks.

Don't violate copyright: ensure Al-generated content doesn't infringe on intellectual property.

Don't use AI in restricted tasks: refrain from using AI in areas like drafting legal documents or binding agreements.

Don't ignore limitations: Al can't replace human expertise or nuanced understanding.

Don't use AI in defined teaching assignments: refrain from using AI when instructed in teaching context.

Guiding principles

This section is derived from the EU harmonised rules on artificial intelligence and amending Regulations (EC)

Human oversight: Ensure that Gen AI systems remain tools to support human decisions rather than replacing them. Human agency and oversight are key to maintaining ethical Gen AI use (EU AI Act, Article 14). Treat Gen AI as a collaborator, not a replacement (you steer the direction).

Data protection: Comply with data protection regulations, ensuring that Gen Al systems do not compromise the privacy of individuals (EU Al Act, Article 10).

Transparency: Make Gen AI system capabilities, limitations, and decision-making processes clear to users. Transparency fosters trust and accountability (EU AI Act, Article 13).

Risk management: Identify and mitigate risks associated with Gen Al use, particularly in high-risk applications. Ensure robust safeguards are in place (EU Al Act, Article 9).

Non-discrimination: Avoid biases in Gen Al outputs by using diverse and representative training data. Ensure Gen Al systems promote fairness and equality (EU Al Act, Article 5).

Accountability: Assign clear responsibility for the deployment and outcomes of Gen Al systems. Ensure operators are accountable for their actions (EU Al Act, Article 29).

Robustness and security: Design Gen AI systems to be resilient against misuse and errors, ensuring safe operation even in adverse conditions (EU AI Act, Article 15).

Source: Link to the Regulation (EU) 2024/1689 (EU AI Act); Regulation - EU - 2024/1689 - EN - EUR-Lex (Accessed 10 September 2025)

Table 1 represents a summary of the utility of Gen AI in relation to ethics and pedagogy.

		Pedagogy		
		Enhancement	Diminishment	
Ethics	High	Revise the statistical coding (eg R) Revise the english structure of text Acknowledge Gen Al when used	Create R code from scratch Find solutions for questions in modules	
	Low	NA	Create text from scratch Create fabricated data Generate list of references without revision Find solutions for modules and tasks Running data analysis in Gen Al Exclusion of stakeholders	

^{*} Definition of ethics is around the risk level for sharing personal data.

Examples of practices to avoid when using Gen AI (Table 1)

Attributing authorship to Gen AI: Gen AI tools cannot be listed as authors on scientific papers. Authorship implies accountability, which Gen AI cannot assume.

Undisclosed Use of Gen AI in manuscript writing: If Gen AI is used to write or edit scientific content, this must be transparently disclosed. Failure to do so may be considered unethical or even fraudulent.

Fabricating or manipulating data: Using Gen AI to generate synthetic data without clear labelling, explanation, and justification is considered unethical. Fabrication or manipulation of data using Gen AI tools is prohibited.

Using Gen Al-generated references without verification: Al tools can fabricate citations or provide inaccurate references. Users must verify all references and not rely solely on Al-generated bibliographies.

Failing to address bias and errors: Users are responsible for identifying and mitigating biases and errors introduced by Al models. Ignoring these issues can lead to flawed or unethical research outcomes.

Using Gen AI without stakeholder engagement: Especially in sensitive fields (e.g., health, social sciences), using Gen AI without consulting affected communities or stakeholders can be ethically problematic.

Cases for Generative Artificial Intelligence Do's and Don'ts

This document outlines practical cases for using Gen AI (e.g. ChatGPT, Gemini, Perplexity, DeepSeek, Microsoft Copilot) in everyday epidemiological tasks. It highlights cases of appropriate and inappropriate use, with examples, advantages, and risks. The goal is to guide fellows on effective, secure, and ethical use of the Gen AI.

General Principles:

- There are differences in the quality and nuance of Gen AI answers between free and paid accounts, so be mindful that outputs may depend on your subscription status. Generative AI tools carry a high risk of producing unpredictable outcomes (due to hallucination and inaccuracy), and factual errors [1], therefore they must be used with caution.
- Never upload sensitive, personal, or identifiable data.
- Always review and critically assess Al-generated output.
- Use AI as a supplement, not a substitute, for core skills.

Area of use	Pros / Cons	Cons
Do's (case description and example))	
Data privacy Deactivate data sharing. For ChatGPT, go to settings > Data controls > Improve the model for everyone OFF	Prevents user data from being used for model training; enhances data security	No contribution to model training

Saves time coloring, facets and annotations so described in the focus becomes on the analysis output and its interpretation - Allows for better visualizations. R Coding R Coding Pebug code. For example, by copybeating the error message from R Into the Al Pack and the Allows for better visualizations. R Coding R Coding R Coding R Coding Pebug code. For example, by copybeating the error message from R Into the Al Pack and the Allows for better visualizations. R Coding R Co			
to remember specific coloring, facets and annotations specific commands analysis output and its interpretation - Allows for better visualizations and its interpretation - Allows for better visualizations and its interpretation - Allows for better visualizations - Saves time - Reduces need for external help - Learning opportunity to migrove the linguistic aspects. Text writing - Saves time - Improves the quality of outputs - Learning opportunity to migrove professional writing	Coding	- Saves time	- Fellows will not understand code as well
to remember specific coloring, facets and annotations specific commands analysis output and its interpretation - Allows for better visualizations and its interpretation - Allows for better visualizations and its interpretation - Allows for better visualizations - Saves time - Reduces need for external help - Learning opportunity to migrove the linguistic aspects. Text writing - Saves time - Improves the quality of outputs - Learning opportunity to migrove professional writing	Create figures in R. For example, to	- Unnecessary	which may limit debugging abilities
specific commands - The focus becomes on the analysis output and its interpretation - Allows for better visualizations R Coding Debug code. For example, by copypasting the error message from R into the All Complex of the	generate a ggplot with specific	to remember	
ommands - The focus becomes on the analysis output and its interpretation - Allows for better visualizations - Sawes time - Sawes time - Fellows don't practice reading help pages - Fellows don't develop independent coding skills without relying on Generative AI - Risk of hallucinations and non-functional solution - A potential missed opportunity of hall ucinations and non-functional solution - A potential missed opportunity to fully understand what each operation and the page - Fellows don't practice reading help pages - Fellows don't practice	coloring, facets and annotations	specific	
- The focus becomes on the analysis output and its interpretation - Allows for better of the secondary of the so-called "logic errors" and and its interpretation - Allows for better of better of the secondary of the so-called "logic errors" and "mathematical errors" △. R Coding R co	J ,	•	
becomes on the analysis output and its interpretation - Allows for better visualizations - Saves time - Pellows don't practice reading help pages - Fellows don't practice reading help pages - Fellow			
analysis output and its interpretation - Allows for better visualizations R Coding Debug code. For example, by copypating the error message from R into the Al erview a covering letter, public least to generate ideas it. e. research questions. All comportunity on the Genard to generate ideas it. e. research questions, and objectives in the Content and structure. analysis. A Coding R Co			
R Coding Debug code. For example, by copypasting the error message from R into the AI R coding Create data-cleaning script. E.g., by recoding date formats to ensure consistency and enable further analysis. Text writing Improve language. For example, the fellow may draft a text in basic language (without sensitive information) and use the Gen AI to might a research AI carning Complement literature searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Research / Learning Complement literature searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research area. Research / Learning Research / Learning Complement literature searches. E.g. day using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Research / Learning Research / Learning Complement literature searches. E.g. day using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Research / Learning Research / Learning Complement literature searches. E.g. day using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Researc			
R Coding Debug code. For example, by copypasting the error message from R into the AI R coding R codi			matnematical errors 🖆.
R Coding Debug code. For example, by copypasting the error message from R into the AI R coding R coding R coding Create data-cleaning script. E.g., by recoding date formats to ensure consistency and enable further analysis. Text writing Text writing Text writing Text writing Research / Learning Complement literature searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Complement literature searches. E.g. hy using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Complement literature searches. E.g. hy using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Complement literature searches. E.g. hy using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Complement literature searches. E.g. hy using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Complement literature searches. E.g. hy using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Complement literature searches. E.g. hy using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Complement literature searches. E.g. hy using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Complement literature searches. E.g. hy using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Complement literature searches. E.g. hy using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Complement literature searches. E.g. hy using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Complement literature searches. E.g. hy tool tool tool to receive a sum			
R Coding Debug code. For example, by copy- pasting the error message from R into the Al R coding date formats to ensure consistency and enable further analysis. Research / Learning copportunity R coding date formats to ensure consistency and enable further analysis. Research / Learning Copportunity R coding date formats to ensure consistency and enable further analysis. Research / Learning Comprove the linguistic aspects. Research / Learning Complement literature searches, E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Complement literature searches, E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Complement literature searches, E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Complement literature searches, E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Complement literature searches, E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Complement literature searches, E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Complement literature searches, E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Complement literature searches, E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Complement literature searches, E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Co			
R Coding Debug code. For example, by copypasting the error message from R into the AI R coding R coding Create data-cleaning script. E.g., by recoding date formats to ensure consistency and enable further analysis. Text writing Text writing Text writing Research / Learning Complement literature searches. E.g. by using the "deep research" tool to improve the linguistic aspects. Research / Learning Complement literature searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Complement literature searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Complement literature searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Complement literature searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Complement literature searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Complement literature searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Complement literature searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Complement literature searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Complement literature searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Complement literature searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Complement literature searches. E.g. by using the "deep research" tool tool tool tool tool tool tool too		- Allows for	
R Coding Debug code. For example, by copypasting the error message from R into the AI R coding R coding R coding R coding R coding R coding Create data-cleaning script. E.g., by recoding date formats to ensure consistency and enable further analysis. Text writing Text writing Text writing Research / Learning Complement literature searches. E.g. by using the "deep research" tool to a research area. Research / Learning Complement literature searches. E.g. by using the "deep research" tool to a research area. Research / Learning Complement literature searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Research / Learning Complement literature searches. E.g. by using the "deep research" tool to detected through a research area. Research / Learning Complement literature searches. E.g. and overview of an overview of a		better	
Debug code. For example, by copy- pasting the error message from R into the AI R coding R coding Create data-cleaning script. E.g., by recoding date formats to ensure consistency and enable further analysis. Text writing Text writing Text writing Improve language. For example, the fellow may draft a text in basic language (without sensitive information) and use the Gen AI to improve the linguistic aspects. Research / Learning Complement literature searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Research / Learning Complement literature searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Complement literature searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Complement literature searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Complement literature searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Complement literature searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Complement literature searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Complement literature searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning - Fast way to discover similar articles and get a have varea and searches and get and get a have varea and get and get a have varea and get and ge		visualizations	
Debug code. For example, by copy- pasting the error message from R into the AI R coding R coding Create data-cleaning script. E.g., by recoding date formats to ensure consistency and enable further analysis. Text writing Text writing Text writing Improve language. For example, the fellow may draft a text in basic language (without sensitive information) and use the Gen AI to improve the linguistic aspects. Research / Learning Complement literature searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Research / Learning Complement literature searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Complement literature searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Complement literature searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Complement literature searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Complement literature searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Complement literature searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Complement literature searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning - Fast way to discover similar articles and get a have varea and searches and get and get a have varea and get and get a have varea and get and ge	R Coding	- Saves time	- Fellows don't practice reading help pages
pasting the error message from R into the AI R coding R coding Create data-cleaning script. E.g., by recoding date formats to ensure consistency and enable further analysis. Text writing Text writing Text writing Research / Learning Complement literature searches. E.g. by using the "deep research" (tool to receive a summary of recent articles in a research Area. Research / Learning Research / Learning Research / Learning Research / Learning Complement literature searches. E.g. at necesive a research would not upon the leads to selective review of a new area - May identify articles not detected through search-queries Research / Learning R		- Reduces need	
R coding			
R coding Create data-cleaning script. E.g., by recoding date formats to ensure consistency and enable further analysis. Text writing Text writing Text writing Terellow may draft a text in basic language (without sensitive information) and use the Gen Al to improve the linguistic aspects. Research / Learning Complement literature searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Research / Learning Research / Learning Complement literature searches. E.g. hy using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning - Fast way to discover similar antices and get a poportunity to improve on the place systematic Pubmed searches are searches are searches. E.g. by discover invited to the AI - Must enable and to the AI - Must enable and to the AI - Must enable and to the AI - Save stime - Improves the quality of first drafts of nother transparent and to the AI - May identify and transpar			
R coding Create data-cleaning script. E.g., by recoding date formats to ensure consistency and enable further analysis. Text writing Text writing Text writing Text writing Improve language. For example, the fellow may draft a text in basic language (without sensitive information) and use the Gen AI to improve the linguistic aspects. Research / Learning Complement literature searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Complement searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Research / Learning Complement searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Complement searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Complement searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Complement literature searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Complement literature searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Complement literature searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Complement literature searches. E.g. by using the "deep research" tool to receive for the literature Ellower review for the literature Ellower search base and the overview of a head warea and the searches of the fellow searches area warea. Research / Learning Complement literature searches. E.g. by using the "deep research" tool to receive for the literature articles and the searches of the fellow searches area warea. Research / Learning Complement literature searches. E.g. by using the "de	lile Al		
- May reduce need for external R support - Learning opportunity to improve the linguistic aspects. Research / Learning Complement literature searches, E.g. by using the 'deep research' tool to receive a summary of recent articles in a research area. Research / Learning Complement literature searches, E.g. discover similar articles and get an overview of a hew area - May identity articles not detected through search-queries accessible - Leas reliance of external support - Leas reliance on Generative AI can assist the process to generate ideas, i.e. research questions, and objectives - Reviewing - Review	- ·		
Create data-cleaning script. E.g., by recoding date formats to ensure consistency and enable further analysis. Text writing Text writing Text writing Text writing Text writing Research / Learning Complement literature searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Research / Learning Research / Learning Research / Learning Complement literature searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning All yidentify articles mot detected through search-queries All yidentify articles more accessible - Less reliance of external support All yidentify articles more accessible - Less reliance of external support All yidentify articles more accessible - Less reliance of external support All yidentify articles more accessible - Less reliance of external support with a search bias, which leads to selective review for the literature and the process to generate ideas and thus losses the graph of the article can't be validated by Generative Al and thus losses the generate ideas and thus lower burden on supervisors subtements of first drafts of foredback. For example, to use the Gen Al review a covering letter, public health communication or professional correspondence and provide feedback on the content and structure. Research / Learning opportunity to improve the quality of first drafts of non-sensitive texts and thus lower burden on supervisors subtements (known as "hallucination") centre file opportunity of the article and the support search beas of the process to generate false statements (known as "hallucination") central research of external statements (known as "hallucination") centre file opportunity opportunity of first drafts of Generativ	K coding		
recoding date formats to ensure consistency and enable further analysis. Text writing Improve language. For example, the fellow may draft a text in basic language (without sensitive information) and use the Gen Al to improve the linguistic aspects. Research / Learning Complement literature searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Complement literature searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Research / Learning Complement literature searches. E.g. and a research area. Research area. Research / Learning Explain an article. For example, when reading an article with complex methodology, ask the Gen Al to break it down into simpler language or answer specific questions. Generating research ideas To use Generative Al to generate ideas, i.e. research questions, and objectives Reviewing Reviewing Reviewing Reviewing Reviewe non-sensitive text for feedback. For example, to use the Gen Al review a covering letter, public health communication or professional correspondence and provide feedback on the content and structure. Review non-sensitive text for feedback and provide feedback on the content and structure. Reviews a covering letter, public health communication or professional correspondence and provide feedback on the content and structure.			
recoding date formats to ensure consistency and enable further analysis. Text writing Improve language. For example, the fellow may draft a text in basic language (without sensitive information) and use the Gen Al to improve the linguistic aspects. Research / Learning Complement literature searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Explain an article. For example, when reading an article with complex methodology, ask the Gen Al to break it down into simpler language or answer specific questions. Reviewing Reviewing Reviewing Review non-sensitive text for feedback. For example, to use the Gen Al review a covering letter, public health communication or professional correspondence and provide feedback on the content and structure. Review a covering letter, public health communication or professional correspondence and provide feedback on the content and structure. Review a covering letter, public health communication or professional correspondence and provide feedback on the content and structure. Review ron-sensitive text for feedback and thus lower burden on supervisors services as a learning opportunity - Saves time - Improves the quality of first drafts of once the quality of first drafts of once the quality of the extinct of the structure of the process to generate ideas of the content and structure. - Maske difficult articles more accessible - Less reliance of external support - Research / Learning - Should not replace systematic Pubmed searches - Senetave Al tend to have literature searches - Senetave Al tend to have literature searches - Generative Al tend to have literature searches - Generative Al tend to have literature searches - Generative Al tend to be inferior in creativity in comparison to humans' generate ideas of the process to generate id	Create data-cleaning script. E.g., by	need for external	
consistency and enable further analysis. Text writing Improve language. For example, the fellow may draft a text in basic language (without sensitive information) and use the Gen Al to improve the linguistic aspects. Research / Learning Complement literature searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Complement literature searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Complement literature searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Explain an article. For example, when reading an article with complex methodology, ask the Gen Al to break it down into simpler language or answer specific questions. Generating research ideas Reviewing Reviewing Reviewing Reviewing Reviewing Auguality of outputs a chust ensure no sensitive content is shared Judiculary of outputs and upport in the facts stated in the articles and get a hoveriew of a cereative Al articles and get and overiew of the literature is shared Judiculary of outputs and upport in to improve professional writing and provide feedback in the content and structure. - Fast way to discover similar articles and get a hoveriew of a cereative Al attend to have literature searches Generative Al tend to have literature searches Sensitive information should not be shared with Generative Al if data security cannot be ensured - Generative Al tend to be inferior in creativity in comparison to humans' generated ideas is full data security cannot be ensured - Generative Al tend to be inferior in creativity in comparison to humans' generated ideas is full data security cannot be ensured - Generative Al tend to be inferior in creativity in comparison to humans' generated ideas is a full data security cannot be ensured - Generative Al tend to be one freed with Generative Al if data security cannot be ensur		R support	- The user should not upload data to the Al
analysis. Text writing Improve language. For example, the fellow may draft a text in basic language (without sensitive information) and use the Gen Al to improve the linguistic aspects. Research / Learning Complement literature searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Complement literature searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Complement literature searches. E.g. hy using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Research / Learning Complement literature searches. E.g. hy using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning - Fast way to discover similar articles and get an overview of a new area. - May identify articles more accessible - Learning underview of a new area and objective feet through search-queries - Masy identify articles more accessible - Less reliance of external support - Research / Learning - Should not replace systematic Pubmed searches - Generative AI tend to have literature search bias, which leads to selective review for the literature laterature search bias, which leads to selective review for the literature search bias, which leads to selective review for the literature search bias, which leads to selective review for the literature search bias, which leads to selective review for the literature search bias, which leads to selective review for the literature search bias, which leads to selective review for the literature search bias, which leads to selective review for the literature search bias, which leads to selective review for the literature search bias, which leads to selective review for the literature search bias, which leads to selective review for the literature search bias searches - Generative AI tend to be inferior in creativity in comparison to humans' generated i			·
Text writing Improve language. For example, the fellow may draft a text in basic language (without sensitive information) and use the Gen Al to improve the linguistic aspects. Research / Learning Complement literature searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Complement literature searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Complement literature searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Research / Learning Complement literature searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. - May identify articles not detected through search-queries Research / Learning - Should not replace systematic Pubmed searches - Generative Al tend to have literature searche bias, which leads to selective review for the literature search bias, which leads to selective review for the literature search bias, which leads to selective review for the literature search bias, which leads to selective review for the literature search bias, which leads to selective review for the literature searches. - Alay identify articles nor accessible - Alay identify articles more accessible - Less reliance of external support - Risk of foundation or spearches. - Risk of hallucinations; responses must be critically assessed - Gen Al can't confirm the facts stated in the article, i.e. the integrity of the article can't be validated by Generative Al end to be inferior in creativity in comparison to humans' generated ideas i	•		
Improve language. For example, the fellow may draft a text in basic language (without sensitive information) and use the Gen AI to improve the linguistic aspects. Research / Learning Complement literature searches, E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Research / Learning Research area. Research / Learning Research area. Research / Learning Research area. Research / Learning Research Learning Research area. Research / Learning Research Learning - Make difficult articles nore accessible - Less reliance of external support answer specific questions. Reviewing Reviewing Reviewing - May improve the linguistic aspects. - May improve professional control to make are and overview of a new area and overview of a new area. - Make difficult articles nore accessible - Less reliance of external support - Reviewing - Reviewing - Makes difficult articles nore accessible - Less reliance of external support - Cenerative AI tend to have literature search bias, which leads to selective review for the literature search bias, which leads to selective review for the literature search bias, which leads to selective review for the literature search bias, which leads to selective review for the literature search bias, which leads to selective review for the literature search bias, which leads to selective and continued and the professional c		See Strong	•
Improve language. For example, the fellow may draft a text in basic language (without sensitive information) and use the Gen AI to improve the linguistic aspects. Research / Learning Complement literature searches, E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Research / Learning Research area. Research / Learning Research area. Research / Learning Research area. Research / Learning Research Learning Research area. Research / Learning Research Learning - Make difficult articles nore accessible - Less reliance of external support answer specific questions. Reviewing Reviewing Reviewing - May improve the linguistic aspects. - May improve professional control to make are and overview of a new area and overview of a new area. - Make difficult articles nore accessible - Less reliance of external support - Reviewing - Reviewing - Makes difficult articles nore accessible - Less reliance of external support - Cenerative AI tend to have literature search bias, which leads to selective review for the literature search bias, which leads to selective review for the literature search bias, which leads to selective review for the literature search bias, which leads to selective review for the literature search bias, which leads to selective review for the literature search bias, which leads to selective and continued and the professional c	Text writing	Saves time	Pick of over reliance on Congretive Al
Improve language. For example, the fellow may draft a text in basic language (without sensitive information) and use the Gen AI to improve the linguistic aspects. Research / Learning Complement literature searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Research / Learning Research area. Research / Learning Research area. Research / Learning Explain an article. For example, when reading an article with complex methodology, ask the Gen AI to break it down into simpler language or answer specific questions. Generating research ideas Generating research deas Reviewing Review	rext writing		
fellow may draft a text in basic language (without sensitive information) and use the Gen Al to improve the linguistic aspects. Research / Learning Complement literature searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Research / Learning Research / Learning Research area. Research / Learning Research / Learning Research area. Research / Learning Research area. Research / Learning Research / Learning Research / Learning Research area. Research / Learning Explain an article. For example, when reading an article with complex methodology, ask the Gen Al to break it down into simpler language or answer specific questions. Renerating research ideas To use Generative Al to generate ideas, i.e. research questions, and objectives Reviewing Reviewing Review non-sensitive text for feedback. For example, to use the Gen Al review a covering letter, public health communication or professional correspondence and provide feedback on the content and structure. Sound not replace systematic Pubmed searches - Senetive Al tend to have literature search bias, which leads to selective review for the literature search bias, which leads to selective review for the literature search bias, which leads to selective review for the literature search bias, which leads to selective review for the literature search bias, which leads to selective review for the literature search bias, which leads to selective review for the literature search bias, which leads to selective review for the literature search bias, which leads to selective review for the literature search bias, which leads to selective review for the literature search bias, which leads to selective review for the literature search bias, which leads to selective review for the literature search bias, which leads to selective review for the literature search bias, which leads to selective review for the literature search bias, which leads to selective review for the literature sear			
Learning opportunity to improve the linguistic aspects.			shared
information) and use the Gen AI to improve the linguistic aspects. Research / Learning Complement literature searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Fax way to discover similar articles and get an overview of a receive a summary of recent articles in a research area. Research / Learning Fax way to discover similar articles and get an overview of a receive a summary of recent articles in a research area. Research / Learning Fax way to discover similar articles and get an overview of a receive Al tend to have literature search bias, which leads to selective review for the literature search bias, which leads to selective review for the literature search bias, which leads to selective review for the literature search bias, which leads to selective review for the literature search bias, which leads to selective review for the literature search bias, which leads to selective review for the literature search bias, which leads to selective review for the literature search bias, which leads to selective review for the literature search bias, which leads to selective review for the literature search bias, which leads to selective review for the literature search bias, which leads to selective review for the literature search bias, which leads to selective review for the literature search bias, which leads to selective review for the literature search bias, which leads to selective review for the literature search bias, which leads to selective review for the literature search bias, which leads to selective review for the literature search bias, which leads to selective review for the literature search bias, which leads to selective review for the literature search bias of Generative Al tend to be inferior in creativity	fellow may draft a text in basic		
information) and use the Gen AI to improve the linguistic aspects. Research / Learning Complement literature searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning False in the search bias, which leads to selective review for the literature search bias, which leads to selective fearch bias, which leads to se	language (without sensitive	- Learning	
improve the linguistic aspects. improve professional writing Research / Learning Complement literature searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Explain an article. For example, when reading an article with complex methodology, ask the Gen Al to break it down into simpler language or answer specific questions. Generating research ideas Generating research questions, and objectives Review non-sensitive text for feedback. For example, to use the Gen Al review a covering letter, public health communication or professional correspondence and provide feedback on the content and structure. improve professional writing - Fast way to discover similar articles and yet and overview of a new area and verview of and verview of a new area and verview of an verview of an verview of a new area and verview of an verview of and verview of an verview of anew area and verview of an verview of an verview of an verview of		opportunity to	
Research / Learning Complement literature searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Research / Learning Research / Learning Research / Learning Explain an article. For example, when reading an article with complex methodology, ask the Gen Al to break it down into simpler language or answer specific questions. Generating research ideas Reviewing Review non-sensitive text for feedback. For example, to use the Gen Al review a covering letter, public health communication or professional correspondence and provide feedback on the content and structure. Past way to discover similar articles and get an overview of a new area - May identify articles more accessible an overview of a new area - May identify articles more accessible an overview of a new area - May identify articles more accessible an overview of a new area - May identify articles more accessible an overview of a new area - May identify articles more accessible accessible - Less reliance of external support - Risk of hallucinations; responses must be critically assessed - Gen Al can't confirm the facts stated in the article, i.e. the integrity of the article can't be validated by Generative Al tend to be inferior in creativity in comparison to humans' generated ideas			9
Research / Learning Complement literature searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning - Make difficult articles more accessible - Less reliance of external support - Research / Learning - Make difficult articles more accessible - Less reliance of external support - Research / Learning - Make difficult articles more accessible - Less reliance of external support - Research / Learning - Make difficult articles more accessible - Less reliance of external support - Research / Learning - Make difficult articles more accessible - Less reliance of external support - Research / Learning - Risk of hallucinations; responses must be critically assessed - Gen Al can't confirm the facts stated in the article, i.e. the integrity of the article can't be validated by Generative Al if the article can't be validated by Generative Al if data security generated ideas [4] - Sensitive information should not be shared with Generative Al if data security cannot be ensured - Generative Al does not identify mistakes with facts in the text, therefore the fellow needs to confirm the facts are correct in the text - Generative Al tends to generate false statements (known as "hallucination") - Generative Al tends to generate false	mile over the migates are process.		
Research / Learning Complement literature searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Research / Learning Research / Learning Research / Learning Explain an article. For example, when reading an article with complex methodology, ask the Gen Al to break it down into simpler language or answer specific questions. Generating research ideas Generative Al tend to have literature search bias, which leads to selective review for the literature is search bias, which leads to selective review for the literature is search bias, which leads to selective review for the literature is search bias, which leads to selective review for the literature is search bias, which leads to selective review for the literature is search bias, which leads to selective review for the literature is search bias, which leads to selective review for the literature is search bias, which leads to selective review for the literature is search bias, which leads to selective review for the literature search bias, which leads to selective review for the literature search bias, which leads to selective review for the literature is search bias, which leads to selective review for the literature search bias, which leads to selective review for the literature search bias, which leads to selective review for the literature search bias, which leads to selective review for the literature is search bias, which leads to selective review for the literature is search bias, which leads to selective review for the literature is search bias, which leads to selective review for the literature is search bias, which leads to selective review for the literature is search bias, which leads to selective review for the literature is search bias, which leads to selective review for the literature is search bias, which leads to selective review for the literature is search bias, which leads to selective for the view for the literature is search bias.			
discover similar articles and get an overview of a new area and with cereive a summary of recent articles in a research area.	Pesearch / Learning		Should not replace systematic Pubmed
Complement literature searches. E.g. by using the "deep research" tool to receive a summary of recent articles in a research area. Research / Learning Explain an article. For example, when reading an article with complex methodology, ask the Gen Al to break it down into simpler language or answer specific questions. Generating research dideas Canerative Al to generate ideas, i.e. research questions, and objectives Reviewing Review non-sensitive text for feedback. For example, to use the Gen Al review a covering letter, public health communication or professional correspondence and provide feedback on the content and structure. articles and get an overview of a new area and overview of a new area. - May identify articles not detected through search-queries - Makes difficult articles more accessible - Less reliance of external support - Risk of hallucinations; responses must be critically assessed - Gen Al can't confirm the facts stated in the article, i.e. the integrity of the article can't be validated by Generative Al 2 Generative Al tend to be inferior in creativity in comparison to humans' generated ideas [4] - May identify articles not detected through search-queries - Makes difficult articles more accessible - Less reliance of external support - Generative Al tend to be inferior in creativity in comparison to humans' generated ideas [4] - May identify articles not detected through search-queries - Generative Al tend to be inferior in creativity in comparison to humans' generated ideas [4] - May identify articles not detected through search-queries - Generative Al tend to be inferior in creativity in comparison to humans' generated ideas [4] - Sensitive information should not be shared with Generative Al if data security cannot be ensured - Generative Al tends to generate vite texts and thus lower burden on supervisors - Serves as a learning opportunity - Generative Al tends to selective review for the literature [3]	The Search / Learning		
by using the "deep research" tool to receive a summary of recent articles in a research area. Research area. Research / Learning Explain an article. For example, when reading an article with complex methodology, ask the Gen Al to break it down into simpler language or answer specific questions. Generating research ideas Generating research questions, and objectives Reviewing Review non-sensitive text for feedback. For example, to use the Gen Al review a covering letter, public health communication or professional correspondence and provide feedback on the content and structure. an overview of a hew area - May identify articles not detected through search-queries - May identify articles not detected through search-queries - Makes difficult articles more accessible - Less reliance of external support - Research / Learning - Makes difficult articles more accessible - Less reliance of external support - Research / Learning - Risk of hallucinations; responses must be critically assessed - Gen Al can't confirm the facts stated in the article, i.e. the integrity of the article can't be validated by Generative Al 2 - Research / Learning - Risk of hallucinations; responses must be critically assessed - Gen Al can't confirm the facts stated in the article, i.e. the integrity of the article can't be validated by Generative Al 2 - Senerative Al tend to be inferior in creativity in comparison to humans' generated ideas ide	0		
receive a summary of recent articles in a research area. Research / Learning Explain an article. For example, when reading an article with complex methodology, ask the Gen Al to break it down into simpler language or answer specific questions. Generating research ideas Generating research deas To use Generative Al to generate ideas, i.e. research questions, and objectives Review non-sensitive text for feedback. For example, to use the Gen Al review a covering letter, public health communication or professional correspondence and provide feedback on the content and structure. Review a summary of recent articles in Alay identify articles not detected through search-queries - May identify articles not detected through search-queries - Makes difficult articles more accessible - Less reliance of external support - Gen Al can't confirm the facts stated in the article, i.e. the integrity of the article can't be validated by Generative Al 2 Generative Al tend to be inferior in creativity in comparison to humans' generated ideas ide			
a research area. - May identify articles not detected through search-queries Research / Learning Explain an article. For example, when reading an article with complex methodology, ask the Gen Al to break it down into simpler language or answer specific questions. - Generating research ideas To use Generative Al to generate ideas, i.e. research questions, and objectives Reviewing Review non-sensitive text for feedback. For example, to use the Gen Al review a covering letter, public health communication or professional correspondence and provide feedback on the content and structure. - Makes difficult articles more accessible - Less reliance of external support - Less reliance of external support - Generative Al tend to be inferior in creativity in comparison to humans' generated ideas ideas ideas with Generative Al if data security cannot be ensured constructive texts and thus lower burden on supervisors - Serves as a learning opportunity - Review Al tend to be inferior in creativity in comparison to humans' generated ideas ideas with Generative Al if data security cannot be ensured - Generative Al does not identify mistakes with facts in the text, therefore the fellow needs to confirm the facts are correct in the text - Serves as a learning opportunity - Generative Al tends to generate ideas with Generative Al does not identify mistakes texts and thus lower burden on supervisors - Serves as a learning opportunity - Generative Al tends to generate false			
Research / Learning Explain an article. For example, when reading an article with complex methodology, ask the Gen Al to break it down into simpler language or answer specific questions. Generating research ideas To use Generative Al to generate ideas, i.e. research questions, and objectives Review non-sensitive text for feedback. For example, to use the Gen Al review a covering letter, public health communication or professional correspondence and provide feedback on the content and structure. A Makes difficult articles more accessible - Less reliance of external support - Less reliance of external support - Generative Al can assist the process to generate ideas - Generative Al tend to be inferior in creativity in comparison to humans' generated ideas (4) - Sensitive information should not be shared with Generative Al if data security cannot be ensured cannot be ensured a learning opportunity - Generative Al tends to generate false statements (known as "hallucinations; responses must be critically assessed - Gen Al can't confirm the facts stated in the article, i.e. the integrity of the article can't be validated by Generative Al tend to be inferior in creativity in comparison to humans' generated ideas (4) - Sensitive information should not be shared with Generative Al does not identify mistakes with facts in the text, therefore the fellow needs to confirm the facts are correct in the text - Generative Al tend to be inferior in creativity in comparison to humans' generated ideas (4) - Sensitive information should not be shared with Generative Al does not identify mistakes with facts in the text, therefore the fellow needs to confirm the facts are correct in the text - Generative Al tend to be inferior in creativity in comparison to humans' generated ideas (4)			review for the literature 🗓
Research / Learning Explain an article. For example, when reading an article with complex methodology, ask the Gen Al to break it down into simpler language or answer specific questions. Generating research ideas To use Generative Al to generate ideas, i.e. research questions, and objectives Reviewing Review non-sensitive text for feedback. For example, to use the Gen Al review a covering letter, public health communication or professional correspondence and provide feedback on the content and structure. detected through search-queries - Makes difficult articles more accessible - Less reliance of external support - Generative Al can't confirm the facts stated in the article, i.e. the integrity of the article can't be validated by Generative Al 2 Generative Al tend to be inferior in creativity in comparison to humans' generated ideas idl - Sensitive information should not be shared with Generative Al if data security cannot be ensured - Generative Al does not identify mistakes with facts in the text, therefore the fellow needs to confirm the facts are correct in the text - Generative Al tends to generate false statements (known as "hallucinations; responses must be critically assessed - Gen Al can't confirm the facts stated in the article, i.e. the integrity of the article cran't be validated by Generative Al if can assist the process to generate ideas idle creative in creativity in comparison to humans' - Sensitive information should not be shared with Generative Al does not identify mistakes with facts in the text, therefore the fellow needs to confirm the facts stated in the article, i.e. the integrity of the article cran't be validated by Generative Al if data security in comparison to humans' generated ideas idle creative in creativity in comparison to humans' generated ideas idle creative in creative Al tend to be inferior in creativity in comparison to humans' generated ideas idle creative in creative Al tend to be inferior in creativity in comparison to humans' generated ideas idle creative Al	a research area.	•	
Research / Learning Explain an article. For example, when reading an article with complex methodology, ask the Gen Al to break it down into simpler language or answer specific questions. Generating research ideas Generating research ideas To use Generative Al to generate ideas, i.e. research questions, and objectives Reviewing Review non-sensitive text for feedback. For example, to use the Gen Al review a covering letter, public health communication or professional correspondence and provide feedback on the content and structure. Search-queries - Makes difficult articles more accessible - Less reliance of external support - Cenerative Al can't confirm the facts stated in the article, i.e. the integrity of the article can't be validated by Generative Al ² Generative Al tend to be inferior in creativity in comparison to humans' generated ideas ⁴ Generative Al tend to be inferior in creativity in comparison to humans' generated ideas ⁴ - Sensitive information should not be shared with Generative Al if data security cannot be ensured - Generative Al does not identify mistakes with facts in the text, therefore the fellow needs to confirm the facts are correct in the text - Generative Al tends to generate false statements (known as "hallucinations") - Generative Al tends to generate false			
Research / Learning Explain an article. For example, when reading an article with complex methodology, ask the Gen Al to break it down into simpler language or answer specific questions. Generating research ideas To use Generative Al to generate ideas, i.e. research questions, and objectives Reviewing Review non-sensitive text for feedback. For example, to use the Gen Al review a covering letter, public health communication or professional correspondence and provide feedback on the content and structure. - Makes difficult articles more accessible - Less reliance of external support - Generative Al tend to be inferior in creativity in comparison to humans' generated ideas described in the article, i.e. the integrity of the article can't be validated by Generative Al tend to be inferior in creativity in comparison to humans' generated ideas described in the article, i.e. the integrity of can't be validated by Generative Al tend to be inferior in creativity in comparison to humans' generated ideas delivation in		detected through	
Explain an article. For example, when reading an article with complex methodology, ask the Gen Al to break it down into simpler language or answer specific questions. Generating research ideas To use Generative Al to generate ideas, i.e. research questions, and objectives Reviewing Review non-sensitive text for feedback. For example, to use the Gen Al review a covering letter, public health communication or professional correspondence and provide feedback on the content and structure. articles more accessible - Less reliance of external support - Generative Al can't confirm the facts stated in the article, i.e. the integrity of the article can't be validated by Generative Al 2 Generative Al tend to be inferior in creativity in comparison to humans' generated ideas [4] - Sensitive information should not be shared with Generative Al if data security cannot be ensured - Generative Al does not identify mistakes with facts in the text, therefore the fellow needs to confirm the facts are correct in the text - Generative Al tends to generate false statements (known as "hallucination") - Generative Al tends to generate ideas oritically assessed - Gen Al can't confirm the facts stated in the article, i.e. the integrity of the article can't be validated by Generative Al tends to be inferior in creativity in comparison to humans' generated ideas [4] - Sensitive information should not be shared with Generative Al if data security cannot be ensured - Generative Al tends to generate accessible - Less reliance of external support - May improve the quality of first drafts of non-sensitive texts and thus lower burden on supervisors - Serves as a learning opportunity - Generative Al tends to be inferior in creativity in comparison to humans' generated ideas [4]		search-queries	
Explain an article. For example, when reading an article with complex methodology, ask the Gen Al to break it down into simpler language or answer specific questions. Generating research ideas To use Generative Al to generate ideas, i.e. research questions, and objectives Reviewing Review non-sensitive text for feedback. For example, to use the Gen Al review a covering letter, public health communication or professional correspondence and provide feedback on the content and structure. articles more accessible - Less reliance of external support - Generative Al can't confirm the facts stated in the article, i.e. the integrity of the article can't be validated by Generative Al 2 Generative Al tend to be inferior in creativity in comparison to humans' generated ideas deas deas ideas	Research / Learning	- Makes difficult	- Risk of hallucinations: responses must be
Explain an article. For example, when reading an article with complex methodology, ask the Gen AI to break it down into simpler language or answer specific questions. Generating research ideas To use Generative AI to generate ideas, i.e. research questions, and objectives Reviewing Review non-sensitive text for feedback. For example, to use the Gen AI review a covering letter, public health communication or professional correspondence and provide feedback on the content and structure. - Gen AI can't confirm the facts stated in the article, i.e. the integrity of the article can't be validated by Generative AI tend to be inferior in creativity in comparison to humans' generated ideas deas deas deas deas deas deas dearning opportunity - Generative AI tend to be inferior in creativity in comparison to humans' generated ideas deas dearly deas deas dearly deas deas dearly deas deas dearning opportunity - Generative AI tend to be inferior in creativity in comparison to humans' generated ideas deas dearly deas dearly deas deas dearly deas deas dearly			
reading an article with complex methodology, ask the Gen Al to break it down into simpler language or answer specific questions. Generating research ideas Generative Al to generate ideas, i.e. research questions, and objectives Reviewing Review non-sensitive text for feedback. For example, to use the Gen Al review a covering letter, public health communication or professional correspondence and provide feedback on the content and structure. - Less reliance of external support - Generative Al tend to be inferior in creativity in comparison to humans' generated ideas [4] - Sensitive information should not be shared with Generative Al if data security cannot be ensured - Generative Al does not identify mistakes with facts in the text, therefore the fellow needs to confirm the facts are correct in the text of the quality of first drafts of non-sensitive texts and thus lower burden on supervisors - Serves as a learning opportunity - Generative Al tend to be inferior in creativity in comparison to humans' generated ideas [4] - Sensitive information should not be shared with Generative Al does not identify mistakes with facts in the text, therefore the fellow needs to confirm the facts are correct in the text and thus lower burden on supervisors - Generative Al tend to be inferior in creativity in comparison to humans' generated ideas [4]	Evolain an article For example when		,
methodology, ask the Gen Al to break it down into simpler language or answer specific questions. Generating research ideas To use Generative Al to generate ideas, i.e. research questions, and objectives Reviewing Review non-sensitive text for feedback. For example, to use the Gen Al review a covering letter, public health communication or professional correspondence and provide feedback on the content and structure. To use Generative Al to generate ideas - Generative Al tend to be inferior in creativity in comparison to humans' generated ideas ideas - Sensitive information should not be shared with Generative Al if data security cannot be ensured - Generative Al does not identify mistakes with facts in the text, therefore the fellow needs to confirm the facts are correct in the text - Generative Al tend to be inferior in creativity in comparison to humans' generated ideas ideas - Sensitive information should not be shared with Generative Al does not identify mistakes with facts in the text, therefore the fellow needs to confirm the facts are correct in the text - Generative Al tend to be inferior in creativity in comparison to humans' generated ideas ideas - Sensitive information should not be shared with Generative Al does not identify mistakes with facts in the text, therefore the fellow needs to confirm the facts are correct in the text - Generative Al tend to be inferior in creativity in comparison to humans' generated ideas idea			
it down into simpler language or answer specific questions. Generating research ideas To use Generative AI to generate ideas, i.e. research questions, and objectives Reviewing Review non-sensitive text for feedback. For example, to use the Gen AI review a covering letter, public health communication or professional correspondence and provide feedback on the content and structure. Support Generative AI tend to be inferior in creativity in comparison to humans' generated ideas id generated ideas id generated ideas id search ideas id generated ideas id ge			
Generating research ideas To use Generative AI to generate ideas, i.e. research questions, and objectives Reviewing Review non-sensitive text for feedback. For example, to use the Gen AI review a covering letter, public health communication or professional correspondence and provide feedback on the content and structure. - Generative AI tend to be inferior in creativity in comparison to humans' generated ideas dependence and process to generate ideas - May improve the quality of first drafts of non-sensitive texts and thus lower burden on supervisors - Serves as a learning opportunity - Generative AI tend to be inferior in creativity in comparison to humans' generated ideas dependence and process to generated ideas dependence and process to generate ideas - Sensitive information should not be shared with Generative AI does not identify mistakes with facts in the text, therefore the fellow needs to confirm the facts are correct in the text - Generative AI tends to generate ideas dependence and provide feedback on the content and structure.			can t be validated by Generative Al ²
Generating research ideas To use Generative AI to generate ideas, i.e. research questions, and objectives Reviewing Review non-sensitive text for feedback. For example, to use the Gen AI review a covering letter, public health communication or professional correspondence and provide feedback on the content and structure. - Generative AI tend to be inferior in creativity in comparison to humans' generated ideas [4] - May improve the quality of first drafts of non-sensitive texts of non-sensitive texts and thus lower burden on supervisors - Serves as a learning opportunity - Generative AI tend to be inferior in creativity in comparison to humans' generated ideas [4] - Sensitive information should not be shared with Generative AI if data security cannot be ensured - Generative AI does not identify mistakes with facts in the text, therefore the fellow needs to confirm the facts are correct in the text - Generative AI tend to be inferior in creativity in comparison to humans' generated ideas [4]		support	
To use Generative AI to generate ideas, i.e. research questions, and objectives Reviewing Review non-sensitive text for feedback. For example, to use the Gen AI review a covering letter, public health communication or professional correspondence and provide feedback on the content and structure. - Can assist the process to generated ideas shared with Generative AI if data security cannot be ensured - Generative AI does not identify mistakes with facts in the text, therefore the fellow needs to confirm the facts are correct in the text - Generative AI tends to generate false statements (known as "hallucination") - Generative AI tends to generate false	answer specific questions.		
To use Generative AI to generate ideas, i.e. research questions, and objectives Reviewing Review non-sensitive text for feedback. For example, to use the Gen AI review a covering letter, public health communication or professional correspondence and provide feedback on the content and structure. - Can assist the process to generated ideas shared with Generative AI if data security cannot be ensured - Generative AI does not identify mistakes with facts in the text, therefore the fellow needs to confirm the facts are correct in the text - Generative AI tends to generate false statements (known as "hallucination") - Generative AI tends to generate false			
To use Generative AI to generate ideas, i.e. research questions, and objectives Reviewing Review non-sensitive text for feedback. For example, to use the Gen AI review a covering letter, public health communication or professional correspondence and provide feedback on the content and structure. Can assist the process to generated ideas deprocess to generate ideas - May improve the quality of first drafts of non-sensitive texts and thus lower burden on supervisors - Serves as a learning opportunity Can assist the process to generated ideas deprocess to generate dideas deprocess to generated ideas deprocess to generate deprocess to generated	Generating research ideas	- Generative Al	Generative AI tend to be inferior in
To use Generative AI to generate ideas, i.e. research questions, and objectives Reviewing Review non-sensitive text for feedback. For example, to use the Gen AI review a covering letter, public health communication or professional correspondence and provide feedback on the content and structure. To use Generative AI to generate ideas Process to generated ideas [4] - May improve the quality of first drafts of non-sensitive texts and thus lower burden on supervisors - Serves as a learning opportunity Process to generated ideas [4] - Sensitive information should not be shared with Generative AI if data security cannot be ensured - Generative AI does not identify mistakes with facts in the text, therefore the fellow needs to confirm the facts are correct in the text - Generative AI tends to generate false statements (known as "hallucination") - Generative AI tends to generate false	1		
ideas, i.e. research questions, and objectives Reviewing Review non-sensitive text for feedback. For example, to use the Gen AI review a covering letter, public health communication or professional correspondence and provide feedback on the content and structure. - May improve the quality of first drafts of non-sensitive texts and thus lower burden on supervisors - Serves as a learning opportunity - Sensitive information should not be shared with Generative AI if data security cannot be ensured - Generative AI does not identify mistakes with facts in the text, therefore the fellow needs to confirm the facts are correct in the text - Generative AI tends to generate false	1		, , , , , , , , , , , , , , , , , , , ,
Reviewing Review non-sensitive text for feedback. For example, to use the Gen AI review a covering letter, public health communication or professional correspondence and provide feedback on the content and structure. - May improve the quality of first drafts of non-sensitive texts and thus lower burden on supervisors - Serves as a learning opportunity - Sensitive information should not be shared with Generative AI if data security cannot be ensured - Generative AI does not identify mistakes with facts in the text, therefore the fellow needs to confirm the facts are correct in the text - Generative AI tends to generate false statements (known as "hallucination") - Generative AI tends to generate false	To use Generative AI to generate	process to	generated ideas [4]
Reviewing Review non-sensitive text for feedback. For example, to use the Gen AI review a covering letter, public health communication or professional correspondence and provide feedback on the content and structure. - May improve the quality of first drafts of non-sensitive texts and thus lower burden on supervisors - Serves as a learning opportunity - Sensitive information should not be shared with Generative AI if data security cannot be ensured - Generative AI does not identify mistakes with facts in the text, therefore the fellow needs to confirm the facts are correct in the text - Generative AI tends to generate false		•	generated ideas [4]
Review non-sensitive text for feedback. For example, to use the Gen AI review a covering letter, public health communication or professional correspondence and provide feedback on the content and structure. the quality of first drafts of non-sensitive texts and thus lower burden on supervisors - Serves as a learning opportunity the quality of first drafts of non-sensitive texts and thus lower burden on supervisors - Generative AI if data security cannot be ensured - Generative AI does not identify mistakes with facts in the text, therefore the fellow needs to confirm the facts are correct in the text - Generative AI tends to generate false	ideas, i.e. research questions, and	•	generated ideas [4]
Review non-sensitive text for feedback. For example, to use the Gen Al review a covering letter, public health communication or professional correspondence and provide feedback on the content and structure. first drafts of non-sensitive texts and thus lower burden on supervisors - Serves as a learning opportunity first drafts of non-sensitive texts and thus lower burden on supervisors - Generative Al tends to generate false statements (known as "hallucination") - Generative Al tends to generate false	ideas, i.e. research questions, and objectives	generate ideas	
feedback. For example, to use the Gen Al review a covering letter, public health communication or professional correspondence and provide feedback on the content and structure. In on-sensitive texts and thus lower burden on supervisors - Serves as a learning opportunity - Generative Al does not identify mistakes with facts in the text, therefore the fellow needs to confirm the facts are correct in the text - Generative Al tends to generate false statements (known as "hallucination") - Generative Al tends to generate false	ideas, i.e. research questions, and objectives	generate ideas - May improve	- Sensitive information should not be
Gen Al review a covering letter, public health communication or professional correspondence and provide feedback on the content and structure. I texts and thus lower burden on supervisors - Serves as a learning opportunity The service of the fellow needs to confirm the facts are correct in the text of text Generative Al tends to generate false The service of the fellow needs to confirm the facts are correct in the text of text of the fellow needs to confirm the facts are correct in the text of the fellow needs to confirm the facts are correct in the text of the fellow needs to confirm the facts are correct in the text of the fellow needs to confirm the facts are correct in the text of text of the fellow needs to confirm the facts are correct in the text of the fellow needs to confirm the facts are correct in the text of the fellow needs to confirm the facts are correct in the text of the fellow needs to confirm the facts are correct in the text of the fellow needs to confirm the facts are correct in the text of the fellow needs to confirm the facts are correct in the text of the fellow needs to confirm the facts are correct in the text of the fellow needs to confirm the facts are correct in the text of the fellow needs to confirm the facts are correct in the text of the fellow needs to confirm the facts are correct in the text of the fellow needs to confirm the facts are correct in the text of the fellow needs to confirm the facts are correct in the text of the fellow needs to confirm the facts are correct in the text of the fellow needs to confirm the facts are correct in the text of the fellow needs to confirm the facts are correct in the fellow needs to confirm the facts are correct in the fellow needs to confirm the facts are correct in the text of the fellow needs to confirm the facts are correct in the facts are correct in the text of the facts are correct in the facts are corre	ideas, i.e. research questions, and objectives Reviewing	generate ideas - May improve the quality of	- Sensitive information should not be shared with Generative AI if data security
Gen Al review a covering letter, public health communication or professional correspondence and provide feedback on the content and structure. I texts and thus lower burden on supervisors - Serves as a learning opportunity The service of the fellow needs to confirm the facts are correct in the text of text Generative Al tends to generate false The service of the fellow needs to confirm the facts are correct in the text of text of the fellow needs to confirm the facts are correct in the text of the fellow needs to confirm the facts are correct in the text of the fellow needs to confirm the facts are correct in the text of the fellow needs to confirm the facts are correct in the text of text of the fellow needs to confirm the facts are correct in the text of the fellow needs to confirm the facts are correct in the text of the fellow needs to confirm the facts are correct in the text of the fellow needs to confirm the facts are correct in the text of the fellow needs to confirm the facts are correct in the text of the fellow needs to confirm the facts are correct in the text of the fellow needs to confirm the facts are correct in the text of the fellow needs to confirm the facts are correct in the text of the fellow needs to confirm the facts are correct in the text of the fellow needs to confirm the facts are correct in the text of the fellow needs to confirm the facts are correct in the text of the fellow needs to confirm the facts are correct in the text of the fellow needs to confirm the facts are correct in the text of the fellow needs to confirm the facts are correct in the text of the fellow needs to confirm the facts are correct in the fellow needs to confirm the facts are correct in the fellow needs to confirm the facts are correct in the text of the fellow needs to confirm the facts are correct in the facts are correct in the text of the facts are correct in the facts are corre	ideas, i.e. research questions, and objectives Reviewing Review non-sensitive text for	generate ideas - May improve the quality of first drafts of	- Sensitive information should not be shared with Generative AI if data security cannot be ensured
health communication or professional correspondence and provide feedback on the content and structure. I lower burden on supervisors - Serves as a learning opportunity opportunity needs to confirm the facts are correct in the text - Generative AI tends to generate false	ideas, i.e. research questions, and objectives Reviewing Review non-sensitive text for	generate ideas - May improve the quality of first drafts of	- Sensitive information should not be shared with Generative AI if data security cannot be ensured - Generative AI does not identify mistakes
correspondence and provide feedback on the content and structure. supervisors - Serves as a learning opportunity supervisors - Generative AI tends to generate false statements (known as "hallucination") - Generative AI tends to generate false	ideas, i.e. research questions, and objectives Reviewing Review non-sensitive text for feedback. For example, to use the	- May improve the quality of first drafts of non-sensitive	- Sensitive information should not be shared with Generative AI if data security cannot be ensured - Generative AI does not identify mistakes
on the content and structure. - Serves as a learning statements (known as "hallucination") - Generative AI tends to generate false	ideas, i.e. research questions, and objectives Reviewing Review non-sensitive text for feedback. For example, to use the Gen Al review a covering letter, public	- May improve the quality of first drafts of non-sensitive texts and thus	- Sensitive information should not be shared with Generative AI if data security cannot be ensured - Generative AI does not identify mistakes with facts in the text, therefore the fellow
learning statements (known as "hallucination") opportunity - Generative AI tends to generate false	ideas, i.e. research questions, and objectives Reviewing Review non-sensitive text for feedback. For example, to use the Gen Al review a covering letter, public health communication or professional	- May improve the quality of first drafts of non-sensitive texts and thus lower burden on	- Sensitive information should not be shared with Generative AI if data security cannot be ensured - Generative AI does not identify mistakes with facts in the text, therefore the fellow needs to confirm the facts are correct in the
opportunity - Generative AI tends to generate false	ideas, i.e. research questions, and objectives Reviewing Review non-sensitive text for feedback. For example, to use the Gen Al review a covering letter, public health communication or professional correspondence and provide feedback	- May improve the quality of first drafts of non-sensitive texts and thus lower burden on supervisors	- Sensitive information should not be shared with Generative AI if data security cannot be ensured - Generative AI does not identify mistakes with facts in the text, therefore the fellow needs to confirm the facts are correct in the text
	ideas, i.e. research questions, and objectives Reviewing Review non-sensitive text for feedback. For example, to use the Gen Al review a covering letter, public health communication or professional correspondence and provide feedback	- May improve the quality of first drafts of non-sensitive texts and thus lower burden on supervisors - Serves as a	- Sensitive information should not be shared with Generative AI if data security cannot be ensured - Generative AI does not identify mistakes with facts in the text, therefore the fellow needs to confirm the facts are correct in the text - Generative AI tends to generate false
I I reterence	ideas, i.e. research questions, and objectives Reviewing Review non-sensitive text for feedback. For example, to use the Gen Al review a covering letter, public health communication or professional correspondence and provide feedback	- May improve the quality of first drafts of non-sensitive texts and thus lower burden on supervisors - Serves as a learning	- Sensitive information should not be shared with Generative AI if data security cannot be ensured - Generative AI does not identify mistakes with facts in the text, therefore the fellow needs to confirm the facts are correct in the text - Generative AI tends to generate false statements (known as "hallucination")
	ideas, i.e. research questions, and objectives Reviewing Review non-sensitive text for feedback. For example, to use the Gen Al review a covering letter, public health communication or professional correspondence and provide feedback	- May improve the quality of first drafts of non-sensitive texts and thus lower burden on supervisors - Serves as a learning	- Sensitive information should not be shared with Generative AI if data security cannot be ensured - Generative AI does not identify mistakes with facts in the text, therefore the fellow needs to confirm the facts are correct in the text - Generative AI tends to generate false statements (known as "hallucination") - Generative AI tends to generate false

Don'ts					
Writing Let the Gen AI independently generate text for manuscripts	- Saves time	- Risk of false information and hallucination - Lack of transparency and accountability - Generative Al can't identify false information in a text (for example when there is a name for a false microorganism, the Gen Al would treat it as a true name), - Risk of copyrights infringing if the produced text overlaps with any published material			
Reviewing Share sensitive information with the Gen AI. For example, by uploading a manuscript with sensitive data for review.	- Saves time	- Risk of data security breaches			
R Coding Share sensitive data. E.g. by uploading raw data to the AI with personal identification numbers	- Gen Al tools can perform fast analysis of raw data	- Data security risk - May violate GDPR or national data protection laws			

^[1] Gapminder; Al Worldview Benchmark; https://www.gapminder.org/ai/worldview_benchmark/

^[2] Sun, Y., Sheng, D., Zhou, Z. *et al.* Al hallucination: towards a comprehensive classification of distorted information in artificial intelligence-generated content. *Humanit Soc Sci Commun* **11**, 1278 (2024)

^[3] Schryen, G., Marrone, M. & Yang, J. Exploring the scope of generative AI in literature review development. *Electron Markets* **35**, 13 (2025).

^[4] Koivisto, M., Grassini, S. Best humans still outperform artificial intelligence in a creative divergent thinking task. *Sci Rep* 13, 13601 (2023)