

# **Free AI Tools for Health Professions Educators**

#### **AI Presentation Tools**

These tools can help medical educators create visually appealing and informative presentations more efficiently.

- **Gamma Al:** This tool can generate entire presentations with detailed content, images, and data visualizations based on a topic. It offers a free account to get started. This can significantly speed up the initial creation of lecture materials.
  - **Example Use:** Inputting "The stages of mitosis" and having Gamma AI generate a slide deck with explanations and relevant visuals.
  - Academic Example Use: Inputting "The mechanism of action of antibiotics" and generating an initial presentation structure and content.
- <u>Slidesgo</u> (Free Al Presentation Maker): Slidesgo offers free slide templates and an Al Presentation Maker that can generate slideshows based on a topic, tone, and style you choose. You can then customize the generated slides.
  - Example Use: Asking the AI to create a "professional" presentation on "Common pediatric infectious diseases."
  - Academic Example Use: Generating a "formal" presentation on "Evidence-based medicine principles."
- <u>Visme</u> (Free AI Presentation Maker): Visme's AI tool can generate presentations from text prompts, offering various styles and the ability to customize with their library of assets. The free plan has limitations but can be useful for basic presentation creation.
  - **Example Use:** Providing a text outline of a lecture on "Pharmacokinetics" and having Visme create an initial presentation draft.
  - Academic Example Use: Creating a presentation on "Global health challenges" from a text-based report.



## **AI Writing Assistants**

These tools can assist in generating various forms of text content, from lecture notes and summaries to quiz questions and patient education materials.

- <u>Wordvice AI</u> (Free AI Writing Assistant & Text Editor): Offers free tools like an AI proofreader, paraphraser, summarizer, and plagiarism checker. These can be invaluable for refining written educational content and ensuring clarity and originality.
  - **Example Use:** Using the AI summarizer to condense a lengthy research article into key points for a student handout.
- <u>HyperWrite</u> (Free Plan): This AI writing assistant can help write paragraphs, complete sentences, summarize text, and even generate email responses. The free plan offers a limited number of AI messages per month. It can be used for drafting explanations of complex medical concepts.
  - Example Use: Asking HyperWrite to "explain the renin-angiotensinaldosterone system in simple terms."
- Scholar AI (part of HyperWrite): This tool specifically helps with academic research by searching through scholarly articles and providing citationbacked results, which can be useful for creating accurate and well-referenced educational materials.
- MACg: This tool is specifically designed for medical professionals and students, making it easier to navigate PubMed. It can help create flashcards, summarize papers, clarify concepts, create quizzes, and write papers with automated citation formatting.
- Notion AI (Free Plan with Limits): If your institution uses Notion, the integrated AI can help summarize research papers, generate quiz questions from lecture notes, and brainstorm curriculum ideas (limited to 20 AI questions per month on the free plan).



#### **AI Assessment Tools**

These tools can aid in creating quizzes, exams, and other assessment methods, as well as providing feedback and analysis.

- <u>Conker.ai</u> (Free Plan): This AI product is designed for teachers to develop assessment tools. The free version allows for basic use, with more advanced features available with payment. It can help generate various question types.
- QuestionWell (Free Plan): This tool helps create questions for students based on online articles. Teachers can input a URL and receive AI-generated questions to test comprehension.
- Quizizz (Free Plan with Al Features): A free tool for creating interactive quizzes. It now includes Al features that can help generate questions from existing content or webpages.

#### AI Tools for Medical Literature Review and Research

- <u>SciSpace</u> (Free Basic Plan): Offers AI-powered literature search, PDF reading with citation-backed answers, and summarization tools.
- <u>Semantic Scholar</u> (Free): An AI-powered search engine for scientific literature with features like citation analysis and paper recommendations.
- **ResearchRabbit** (Free with Account): A tool that visually maps research connections, helping discover related papers and track new publications in a field.
- Elicit (Free Basic Plan): An AI research assistant that helps find relevant papers, summarize findings, and answer research questions based on the literature.



- <u>Connected Papers</u> (Free Basic Features): Creates visual graphs of academic papers, showing connections and influential works in a research area.
- Iris.ai (Free Basic Plan): Uses conceptual search to understand research context and find cross-disciplinary connections in literature.
- **Consensus** (Free with Account): An AI search engine that extracts and synthesizes findings from scientific papers to answer questions.

#### **AI Tools for Curriculum Development**

- **TutorAl:** This platform aggregates content on a given topic and presents it as an online course structure, which could help in outlining a curriculum.
- **Mind mapping tools with Al assistance:** Some mind mapping software now includes Al features to help brainstorm and organize curriculum topics. Check tools like <u>MindMeister</u> or <u>Miro</u> for such functionalities.

## Al Image Generators (with an academic focus)

These tools allow you to create custom medical illustrations, diagrams, and other visuals from text prompts, which can greatly enhance learning materials.

- <u>Microsoft Designer (Image Creator)</u>: Useful for generating custom visuals for lectures and educational materials.
  - Academic Example Prompt: "A diagram illustrating the Krebs cycle with labeled enzymes and intermediate molecules."
- <u>Deep Dream Generator (DDG)</u>: Can be used to create visually engaging abstract representations of medical concepts.
  - Academic Example Prompt: "A cellular view of inflammation with immune cells and cytokines depicted in a painterly style."



- <u>Servier Medical ART (SMART)</u>: A library of ready-to-use, professional medical illustrations covering a wide range of topics.
  - **Academic Use:** Directly incorporating their high-quality anatomical diagrams into presentations or handouts.
  - **Example:** Downloadable slide sets on the cardiovascular system, nervous system, anatomy, and more.

### **AI Video Generators**

These tools can help transform text or existing content into engaging video explanations.

- <u>CapCut (Free AI Video Generator</u>): This free video editing software has AI features that can generate videos from prompts. It allows for customization with AI voiceovers, animated text and graphics, background music, and smooth transitions. This can be useful for explaining complex medical topics visually.
  - Example Use: Inputting a blog post about the pathophysiology of diabetes and having CapCut generate a short, animated video explaining the key mechanisms.
  - Academic Example Use: Creating a video summarizing the key findings of a seminal research paper.
- KreadoAI (Free Plan): This platform allows you to create AI videos using digital avatars and AI voices from text, images, or PowerPoint presentations. The free plan offers a limited duration of video creation and text-to-speech. It could be used for creating virtual patient scenarios or delivering information in a more personal way.
  - **Example Use:** Creating a video with an AI avatar explaining the steps of a physical examination.
  - **Academic Example Use:** An AI avatar explaining a difficult physiological concept like action potential propagation.