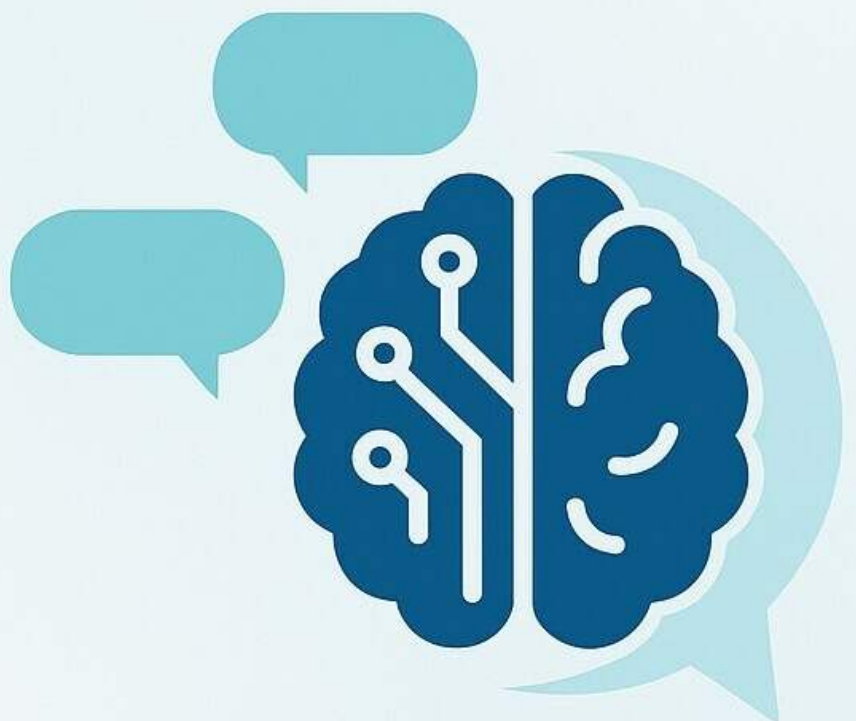


# AI Prompt Templates for Scientists

---

A Smarter Approach to  
Experimental Challenges



Jeya Chelliah B.Vsc Ph.D

# A Powerful Tool for Scientists to Unlock the Potential of AI

***Jeya Chelliah B.Vsc Ph.D***

In the fast-paced world of research, scientists are constantly seeking efficient tools to streamline their work, generate novel insights, and accelerate discovery. Large Language Models (LLMs) like ChatGPT have emerged as powerful allies in this quest. However, the key to unlocking their full potential lies in how we prompt them. That's where prompt templates come in.

A prompt template is a structured prompt that includes replaceable variables or placeholders. Instead of writing a new prompt every time you want to explore a different angle or research question, a prompt template allows you to simply plug in your specific data—whether it's a type of cancer, a gene of interest, or an experimental condition. You copy, replace the placeholders, and paste it into the LLM. It's that simple.

Think of prompt templates as blueprints: just like a building blueprint guides construction with a consistent structure but can be customized for different locations or client needs, prompt templates give you a reusable and reliable framework to generate consistent, high-quality responses across different scientific contexts.

For busy scientists, this approach is a game changer. Instead of crafting prompts from scratch, you can reuse a single well-designed template to explore multiple hypotheses, compare results across conditions, or fine-tune your question structure—all without rewriting. This consistency saves time, reduces cognitive load, and allows for more systematic exploration of ideas, making it an incredibly efficient way to engage with LLMs.

Prompt templates also make it easier to test different prompt formats with different data inputs, helping you discover which phrasing or structure yields the most insightful answers. Whether you're troubleshooting experiments, brainstorming research ideas, or interpreting complex datasets, prompt templates offer a reliable starting point.

Stay tuned—we're developing a series of prompt templates tailored for various scientific domains, including cancer biology, immunology, microbiome research, and more. These ready-to-use tools are designed to help you think faster, work smarter, and explore deeper with AI.