Review safer frameworks for ordering DNA

Intermediate · A few weeks · Free · Project idea

Online version: https://ai-safety-sandbox.vercel.app/projects/dna-ordering-frameworks-review/

Summary

Compare “know your customer” and other frameworks for making DNA ordering more secure, drawing on what finance and other industries already do.

Why it matters

Screening sequences is only half the story; knowing who is ordering matters too.

What you will have at the end

A comparative review with recommendations.

Before you start: dual-use risk

Some biosecurity work can be misused. Work with an experienced mentor, keep anything you publish high-level, and ask before sharing detailed material. See BlueDot’s guide: https://blog.bluedot.org/p/dual-use-advice

How to start (tick each box as you go)

- [ ] **1. Write your question in one sentence.**
- [ ] **2. Spend 30 minutes finding what has already been written about it.**
- [ ] **3. Collect evidence in a simple table: claim, source, how strong.**
- [ ] **4. Draft 1–2 pages: answer first, then reasons, then uncertainties.**
- [ ] **5. Ask one person to poke holes in it, revise, and share.**

Key terms

DNA synthesis screening
Checking orders for synthetic DNA, and the customers placing them, so companies do not unknowingly help someone build a dangerous pathogen.

Source and links

Hatta & Bazarragchaa — A hundred project ideas in biosecurity (2025)
https://casualphysicsenjoyer.com/Essays+in+progress/Biosecurity/A+hundred+project+ideas+in+Biosecurity

When you have finished

Write a few paragraphs on what you did, what you found and what you would try next, and share it with

a friend, your society or online.

Courses, mentors, small grants and communities:
https://ai-safety-sandbox.vercel.app/next-steps/

Questions? Ask in AI Safety Cardiff University (AISCU): https://aiscu.org/

Notes