AI SAFETY SANDBOX · BIOSECURITY

Extend Cliver: check whether a customer really works on an organism

Intermediate · A few weeks · Free · Project idea

Online version: https://ai-safety-sandbox.vercel.app/projects/orcid-taxid-tool/

Summary

Given a researcher's ORCID ID, return the organisms they have published on, so a DNA synthesis company can quickly check whether a flagged order fits the customer's research history.

Why it matters

Today this check is ad hoc googling. A good second-stage signal makes customer screening faster and fairer.

What you will have at the end

A contribution to an open customer-screening tool.

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

Status

The original tool has been built as Cliver (ACX grant). Extensions are still welcome.

Possible directions

- Add PubMed and Europe PMC coverage
- Name-based search with affiliation heuristics
- Finer-grained organism extraction from papers
- Validate how often the signal would mislead (synthetic biologists order from many organisms)

How to start (tick each box as you go)

- [ ] **1. Read the README and contributing guide, and get the project running locally.**
- [ ] **2. Pick one small, well-defined piece of work (look for "good first issue").**
- [ ] **3. Say on the issue that you are working on it, then open a draft pull request early.**
- [ ] **4. Ask for feedback while it is still small; respond to review quickly.**

- [ ] **5. Write a short post about what you built and learned.**

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

Langenkamp & Alexanian — Five tractable biosecurity projects you could start tomorrow (2025)
https://forum.effectivealtruism.org/posts/RwMpnHwqhTZ2rrwbr/five-tractable-biosecurity-projects-you-could-start-tomorrow

Cliver
https://cliver.bio/

Preprint on AI-assisted customer verification
https://www.biorxiv.org/content/10.64898/2026.02.27.708645v1

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