

THE 7TH TIMEPIE LONGEVITY FORUM · BIOHACKER TRACK

BIOHACK.IT



Turn self-experimentation into evidence.

Open infrastructure for structured human self-experimentation.

PRESENTED AT



September 12–13, 2026 · Shanghai

Open source · AGPL-3.0 · Non-profit — Hacking Biology

WHO AM I

Fabio Pietrosanti – 1980 – Geeky fingers.

Hacker from European underground ecosystem since 1995.

System Administrator -> Network Engineer -> Cybersecurity Expert -> Software Developer -> Technology Innovator (2 PCT patents) -> Tech Entrepreneur -> Social Entrepreneur (anticorruption) -> Biohacker

2022: Mom died off cancer -> Getting into Biology to understand Oncology

2023: Me getting Older -> Getting into Longevity -> Experimenting on me -> Public Awareness -> Make new tools for me and fellows biohackers

2026: Releasing Biohack.it Project and Hacking Biology Foundation



THE GAP

Longevity intervention is running far ahead of longevity measurement.

People already adopt off-label drugs, peptides, HBOT, plasmapheresis. But the protocol lives in spreadsheets, forum posts and chat prompts — not comparable, not followable, not readable by a physician.

130+

biomarkers a serious protocol tracks —
blood, DNA methylation, DEXA

$N = 1$

an isolated self-experiment carries almost
no statistical power

0

shared representation layer for protocol &
biomarker across people and labs

Bryan Johnson has a lab and a team. Everyone else has a spreadsheet. A thousand N-of-1 on the same protocol, made comparable, are a different scientific object — and it doesn't exist yet.

The biohackers community: Protocol and Measurement

Let people choose their way, among a database of intervention that can compose a custom protocol, reporting back specific health KPIs to measure impact of anything new being done or drugs taken. Example from [rapamycin.news forum](#)



Rapamycin raises my LDL and ApoB
rapamycin, blood-test, side-effect



DeStrider member 3d

My LDL was 67 before I started Rapamycin. After I started, it went up to 120. I added Bempedoic Acid and Ezetemibe and it came back down to 67. I've since added 5 mg Atorvastatin and my LDL and ApoB are now 48.

My Dementia Protocol - Please improve it and offer advice
dementia



DrFraser Longevity Expert 1 Jan '25

Here is my protocol right now for Dementia risk reduction, particularly on those with ApoE4's.

Just like the post on take down my stack of supplements, I want community input on this on items I've missed or have wrong. This is the beauty of a community of smart motivated individuals. I can improve my protocols with you input, which will positively impact my patients.

Here it is:
Lifestyle options/labs/medications/supplements to risk mitigate for dementia



Cardiovascular Health 2026



John_Hemming 1 May 5

Its an interesting chart. One of my labs gives ApoA-I and I had not looked at it before. I have just looked at it and it varies quite a bit. I think I will try to find how how it varies (in the sense of what exogenous substance causes it to vary). That will have to wait as a project.

I managed to get an LLM to convert my lab tracker to a spreadsheet. I am not sure it worked that well, but this the variation: mg/dL

202.60 167.60 187.30 174.60 178.00 194.50 204.40 201.50 174.00 202.90 164.40 185.70 187.30 190.10 226.40 185.50 198.30 187.30 181.80 200.10 216.30 200.90 190.60 205.20 159.80 177.20 176.40 202.40 172.90 183.10 189.70 168.30 167.80 172.10 165.70 161.60 179.50 200.70 185.60 168.40 173.20 184.10 194.50 176.70 166.20 161.70 169.30 163.60 176.20 176.70 169.20 171.50 171.40 172.50 159.40 150.40 153.30 168.00 158.40 173.90 162.10 166.20 161.20 188.20 190.60

 Reply

WHAT MAKES IT COMPUTABLE

The same protocol, written three ways, is one entity.

Standardization of data is a key to bring research value of biohackers N=1

"rapamycin 6mg weekly"
"sirolimus 6 mg every Sunday"
"Rapa 6 mg q7d"



RxNorm 35302 · 6 mg · every 7 days · pulsed

human-readable, research-useless

one computable entity, linked to your biomarkers over time

Do this ten thousand times and a forum's worth of prose becomes a dataset.

THE PLATFORM

Document your protocol. Measure it. Share it.

01 — DOCUMENT

What you take & do

Substances, therapies, exercise, nutrition — with dose, timing and real cycle schemas. Create from scratch, or copy any public protocol with one click.

02 — MEASURE

Efficacy & safety

Biomarkers with reference, optimal and safety ranges, plus biological clocks (PhenoAge, epigenetic, glycation). Upload past lab reports, get your history in graphs.

03 — SHARE

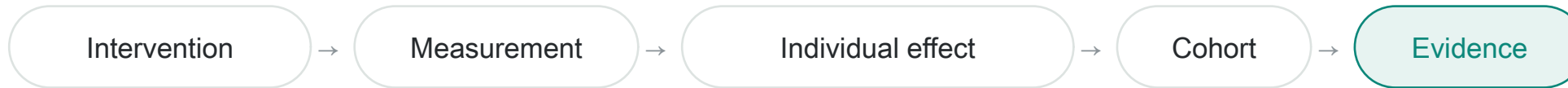
Open by default

Publish your protocol and its outcomes. Quality comes from three layers: deterministic validation, community review, expert oversight.

Open source, free, non-profit — built on the community that already exists, not a forum rebuilt from scratch.

HOW IT WORKS

From one intervention to shared evidence.



- ◆ **Intervention** what you take and do — dose, timing, real cycle schema, versioned with every change.
- ◆ **Measurement** standards-coded biomarkers (LOINC/UCUM) with lab, method and provenance attached.
- ◆ **Individual effect** your own before/after, bound to the protocol version that was active at the time.
- ◆ **Cohort** everyone running the same protocol, weighted by adherence and data completeness.
- ◆ **Evidence** an open dataset the community — and researchers — can actually interrogate.

FOR HACKERS

GitHub for biological self-experimentation.

If you have ever used version control, you already know how this works.

repository

a protocol

fork

copying someone's protocol

commit

a dose change, with its reason

release

a protocol version

CI

safety monitoring — baseline, inherited markers, overdue

issues

a contested claim, discussed in public

telemetry

your biomarkers over time

README

the doctor sheet

dataset

the open research output

WHO IS EXPOSED

The beginner who copies is the person most at risk.

PRIMARY USER

The experienced biohacker

Designs, self-administers, iterates — but the results today are just anecdotes: claimed, not measured, impossible to compare.

HIGHEST RISK

The beginner who copies

Reads a forum thread or an influencer hyping a compound and starts taking it — no baseline, no safety markers, no measurement.

RECIPIENT, NOT USER

The treating physician

Today receives, at best, a handwritten sheet. Deserves a legible, complete view of what is taken and why.

The person who copies an off-label compound off a forum thread — without knowing to monitor kidney and liver — is exactly the case where the platform protects health.

HARM REDUCTION

Follow a protocol — inherit its safety.

- ◆ **Mandatory baseline** before you can follow a protocol at all — plus an explicit risk acknowledgment.
- ◆ **Safety markers inherited automatically** from every active compound — safety is never opt-in.
- ◆ **Dose sanity check** catches the extra zero — plausibility validation of a number, not clinical advice.
- ◆ **Overdue is a safety gap** “rapamycin active for 94 days, liver panel overdue by 34.”

This is the module that justifies the project. Biohackers already take the risk today — without any of it.

DATA MODEL

Three questions, deliberately kept apart.

TestingProtocol

What I measure, and when. A versioned set of measures and timepoints.

TreatmentPlan

What I take and do. Versioned interventions — self-managed or physician-assigned.

Goal

What I want to change. Mapped onto the Hallmarks of Aging.

Substance → SafetyRule → Biomarker → Measurement → Dashboard

“What you take” and “how you are” are the same data structure, read from two sides.

THE MVP · WHAT SHIPS FIRST

Upload your past lab reports. Get your clinical baseline. Free.

A HARD BOUNDARY

The LLM writes words, never numbers

Extraction, mapping and thresholds are deterministic and reproducible. The model only produces the plain-language narration — generated once and cached.

BUILT FOR AGGREGATION

LOINC + UCUM + method, every value

The only architecture compatible with releasing open data. Three ranges per analyte: laboratory reference, longevity-optimal, safety — each with its source.

Artificial Intelligence uses: AI4L and Evipedia

Artificial Intelligence is meant to be used not just to process unstructured data but to:

- Evaluate Safety Profiles and Biomarkers
- Optimize Scheduling for bioavailability and safety
- Produce dosing algorithms proposal

Biohack.it by design reuse AI's LLM based on **AI for Practical Longevity** framework by **Forever Healthy Foundation**.

When considering an intervention, naturally, questions arise such as:

- What does the science say about the intervention?
- What do the experts say?
- What are the potential benefits? At what magnitude?
- What potential risks are involved?
- Are there risk mitigation strategies?
- What does a good therapeutic protocol look like?
- How do we monitor success?



AI4L Design Goals

To maximize trustworthiness, quality, and utility of the generated reviews, we have focused on the following goals:

Trusted Knowledge - To build trust, the AI needs to base its answers only on evidence from scientific sources, peer-reviewed journals, clinical trials, and reputable experts' opinions.

Reproducible Structure - Reviews should always follow the same format, making it easier to learn from them, judge their quality, and compare reviews from different models.

Measurable Quality - There should be a way to objectively evaluate the quality of a review. Depth, breadth, source quality, analytic quality, completeness, and the elimination of hallucinations are important factors.

Self-Auditing - The system should be able to meticulously audit the quality of its reviews — without requiring human review as a prerequisite for improvement.

Self-Refinement - The AI should be able to correct its mistakes by using the result of a self-audit.

Simplicity - Ideally, our tool would be a single prompt that anyone could easily download and use. It should work with all major models so we can compare reviews, easily identify, and use the best AI at any time.

AI4L <https://github.com/forever-healthy/AI4L>

Evipedia MCP <https://github.com/forever-healthy/evipedia-mcp>

forever healthy

AI for Practical Longevity

evipedia.ai

OPERATIONS

Organization Scheduling DIY -> “like a pro”

Maintaining an ongoing DIY high quality trial program, requires a lot of organization and scheduling. Hacking Biology platform is meant provides a convenient way on how to carry on the protocol:

- Scheduling for taking supplements, pharmaceuticals, intervention
- Scheduling measurements (booking, appointments, recording data)
- Book log to record fasting adherence and nutrition exception
- Providing supply organization (when to buy what and from where)

WHAT THIS IS — AND WHAT IT IS NOT

Does it aim at becoming a distributed clinical trial?

This is self-managed, self-declared, self-selected experimentation. No randomisation, no blinding, no controlled conditions. People change protocol halfway, measure irregularly, and drop out.

Biohack.it “may” be a useful dataset for investigative lead for distributed trial taking advantage of the so many guinea pigs taking the risks by themselves with very similar $N=1$.

Biohack “may” not be a useful dataset because biohackers do mix many different interventions, supplements, drugs, nutrition habit.

- ◆ **Every number carries its confidence** value, uncertainty, provenance and evidence level — or it is not shown.
- ◆ **Observed, never caused** “among qualifying users exposed to X, the observed change was Y.”
- ◆ **Negative results are welcome** “I tried X. Nothing happened.” — the data biohacking always loses.



RADICALLY OPEN BY DEFAULT

Open data? Radically Open Data!

SELF-GENERATED

Open & linked data

Everything public — profiles, protocols, treatments, measurements — is released as a clonable snapshot, coded and linked, sufficient to seed an independent instance.

RADICALLY OPEN

Raw Clinical Data

All users have to upload their original measurement papers, to enable any third part to re-elaborate from scratch the entire data extraction pipeline.

STANDARD EXPORT

But stick to structured data

HL7 FHIR internally, OMOP for research export, LOINC/UCUM for analysis, RxNorm for drugs

Standards, not silos: HL7 FHIR internally, OMOP for research export, LOINC/UCUM for analytes — so what you produce is research data, not another wellness silo.

BUILT IN THE OPEN

Public Functional Blueprint for Public Code Maintainability

24 capabilities, 140+ requirements — protocols, biomarkers, safety, community, evidence and open data — browsable at <https://biohack.it/specs> , growing with community review.

Protocols

create · copy · import · versioned

Blood Layer

biomarkers · clocks · deterministic

Safety guardrails

baseline · inheritance · dose check

Community & Studies

follow/copy · cohorts · N-of-1

Open Data & Standards

LOINC/UCUM · FHIR/OMOP · clonable

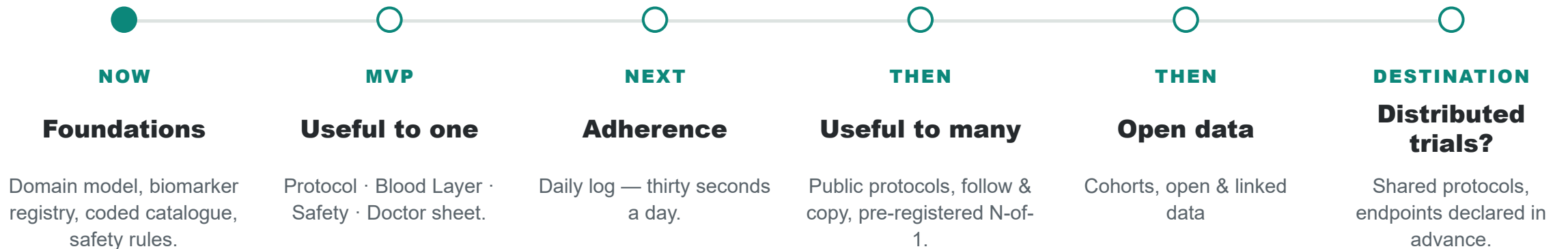
AI, Evidence & Provenance

AI4L · Evipedia · attribution

Specifying broadly costs little. Building broadly costs everything — so what we build first is deliberately narrow.

MVP FIRST

An initial Roadmap for a first release



Next in Roadmap: procurement, advanced nutrition, therapeutics scheduling, genomics beyond import, MCP agent access.

JOIN US

Build this with us.

This is open infrastructure, and it is early. Every one of these roles is genuinely open — and each one changes what the project becomes.

Biohackers

Bring your experience into the specification, and your protocols and measurements into the software.

Software hackers

Build it. AGPL, public specification, open issues — written down before it is written in code.

Researchers & scientists

Keep us honest on validity, uncertainty and evidence — while keeping it usable by a beginner.

Longevity enthusiasts

Volunteer to spread it: community, translation, events. A tool nobody knows about produces no data.

Fundraisers & philanthropy

Build the funding pipeline — grants and philanthropy — so it never has to become commercial.

Tell us which of the five you are — and what you would like to work on.

GET IN TOUCH

Contacts & references.

Telegram Group Chat



Scan, or open t.me/+0qg9-HC4Nx45OTI8 — project updates and open discussion.

WeChat 微信



Scan to add Fabio — he will add you to the biohack.it group chat.

EMAIL

research@hackingbiology.com

WEBSITE

biohack.it

SOURCE

github.com/hackingbiology/biohackit

LINKEDIN

company/biohackit · in/secret

X · TWITTER

[@fpitrosanti](https://twitter.com/fpitrosanti)

RAPAMYCIN NEWS

rapamycin.news/u/hackingbiology.com



THE INVITATION



Everyone buys anti-aging. **Almost no one measures it.**

Let's measure it — together, in the open.

Open infrastructure for structured human self-experimentation — fork it, self-host it, own your data.
The community already exists; now it gets its instrument.

BIOHACK.IT

AN OPEN LABORATORY FOR LONGEVITY · NON-PROFIT · AGPL-3.0