ONE HEALTH Codeathon

February 26-28, 2020 | USF Library Grace Allen Room

Host-microbiome interactions in global health

Collaborative coding integrating data sciences, public health, & humanities research

At this NCBI-style Codeathon teams will work to uncover microbiome interactions across the globe by integrating:

- ➤ Genetics
- ➤ Genomics
- ➤ Clinical data
- ➤ Geoscience
- ➤ Social sciences

Sponsored by the USF Genomics Program & the Institute for the Advanced Study of Culture and the Environment, in collaboration with the USF Omics Hub and USF Initiative on the Microbiome

Codeathon goals

Team-lead responsibilities

Tips/Strategies

Logistics

ROADMAP

Jenna Oberstaller, PhD, USF Omics Hub

Guiding principles

- We need to:

- Strengthen the community that the hackathon is for.

- Be welcoming to newcomers to the community.

- Provide an opportunity for participants to learn something new.

- Provide a space and a time for participants to make headway on problems they are interested in.

Don't expect to have actually solved a problem by the end of the hackathon. Real life problems are hard! Think of the hackathon as a pit-stop on a long journey to solve problems or as a training session to prepare participants for solving problems.

https://hackathon.guide/

Priorities

- FRAMING your problem succinctly, powerfully, convincingly

- Delivering a MINIMUM VIABLE PRODUCT
  - Proof of concept
  - Prototype

- Team-lead responsibility will be to prioritize tasks needed to deliver MVP

Challenges

5 ROLES NEEDED ON EVERY HACKATHON TEAM

UX/UI DESIGNER · PROJECT MANAGER · DOMAIN EXPERT

BACKEND DEVELOPER · FRONTEND DEVELOPER

Successful hackathon teams are made up of more than just coders. Here are five roles that every hackathon team will need to compete in GlobalHack.

- Welcoming and integrating NON-CODING skillsets

https://eqstl.com/5-roles-every-hackathon-team-needs/

Before the hack

- Schedule pre-meeting with team-members
  - Jenna will provide a template email you can build on

- Have a one-sentence description of your project
  - Will not be finalized yet—point of the pre-meeting will be to get team on board, share ownership, strategize

- Team-members should understand team project-objectives and roughly know what they'll be working on

- NO CODING before the hack!

Day of the hack

Schedule: The 3-day codeathon will begin the morning of Wednesday, February 26th with a series of talks regarding the event, its purpose, and the significance of the problems being investigated. Teams will initiate work on their projects Wednesday afternoon and will have the entirety of Thursday along with Friday morning to complete their work. Each team will present their work Friday morning and an award will be given based on the evaluations of an external review panel.

Feb 26th

9:00 – 9:30 am
Coffee & registration

9:30 – 10:00 am
Presentation by Elizabeth Miller on evolutionary and anthropological dimensions of microbiomes

10:00 – 10:30 am
Presentation by Ren Tao on Geo Datascience

10:30 – 11:15 am
Coffee break and team get-together

11:15 am – 12:00 pm
Team meet-up

12:00 – 1:00 pm
Lunch

1:00 – 4:00 pm
Codeathon

4:00 – 4:30 pm
Day one round up

4:30 pm (optional)
Additional coding time

Feb 27th

9:00 am – 11:00 am
Codeathon

11:00 am – 12:00 pm
Team briefing

12:00 – 1:00 pm
Lunch

1:00 – 4:00 pm
Codeathon

4:00 – 4:30 pm
Day two round up

4:30 pm (optional)
Additional coding time

Optional Dinner (TBD)

Feb 28th

9:00 am – 11:00 am
Codeathon

11:00 am – 12:00 pm
Final presentations

12:00 – 12:15 pm
Judge Deliberation
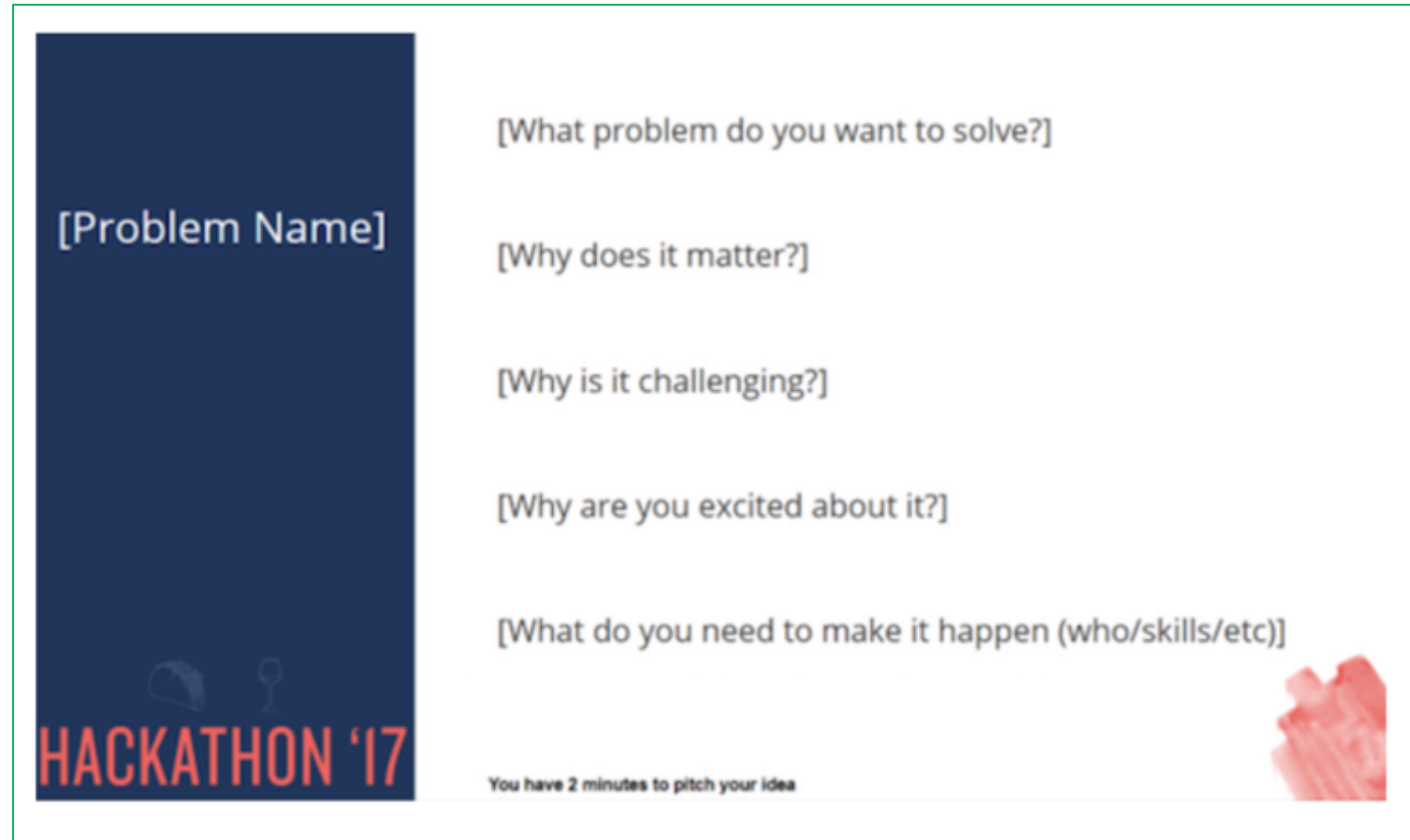
12:15 – 12:30 pm
Awards

- First priority:
  - Make a project flow-chart
  - Review each member's tasks
  - Upload to your team's github repo
- UPDATE throughout the event

The time you quit every day (AFTER 4:30 daily round-up presentations) is up to you

venue will be open 24 hours

KEY QUESTIONS to organize your projects around

STAY ON TASK!

[Problem Name]

HACKATHON '17

[What problem do you want to solve?]

[Why does it matter?]

[Why is it challenging?]

[Why are you excited about it?]

[What do you need to make it happen (who/skills/etc)]

You have 2 minutes to pitch your idea

https://www.cultureamp.com/blog/hackathon-guide-how-to-nurture-cross-team-collaboration/

Progress-checks

STAY ON TASK!

- Each team will make an initial presentation of their plans/workflow, take questions (5 MINUTES)

- At the end of each coding-day, all teams will give a short update of their progress, priorities for the next day

- Coding can continue in our venue indefinitely over the course of the event, open 24 hours (OPTIONAL)

Team communication

STAY ON TASK!

- Swamy will establish a slack-channel and send invites

- We will be writing a manuscript as we go, IN REAL TIME, via GoogleDocs
  - each team will contribute rationale, methods, results, conclusions
  - DO NOT put this off, or we will not have a manuscript—capitalize on your team's momentum and enthusiasm during the hack.

- GitHub
  - All teams have their own repositories which I (Jenna) have already initialized
  - MAKE RULES for updates/merges etc. among your teams to limit chaos
    - Suggestion: make sure every team-member knows to PULL the repo every time immediately before they add/commit (so they have the most-updated copy) to avoid merge-headaches/lost data
    - And/or designate one person as push-er
    - Or whatever else works for you . . .