

# Crowdsourcing Science

JDI  PEN

# JDI Open

in two weeks: Data Sharing

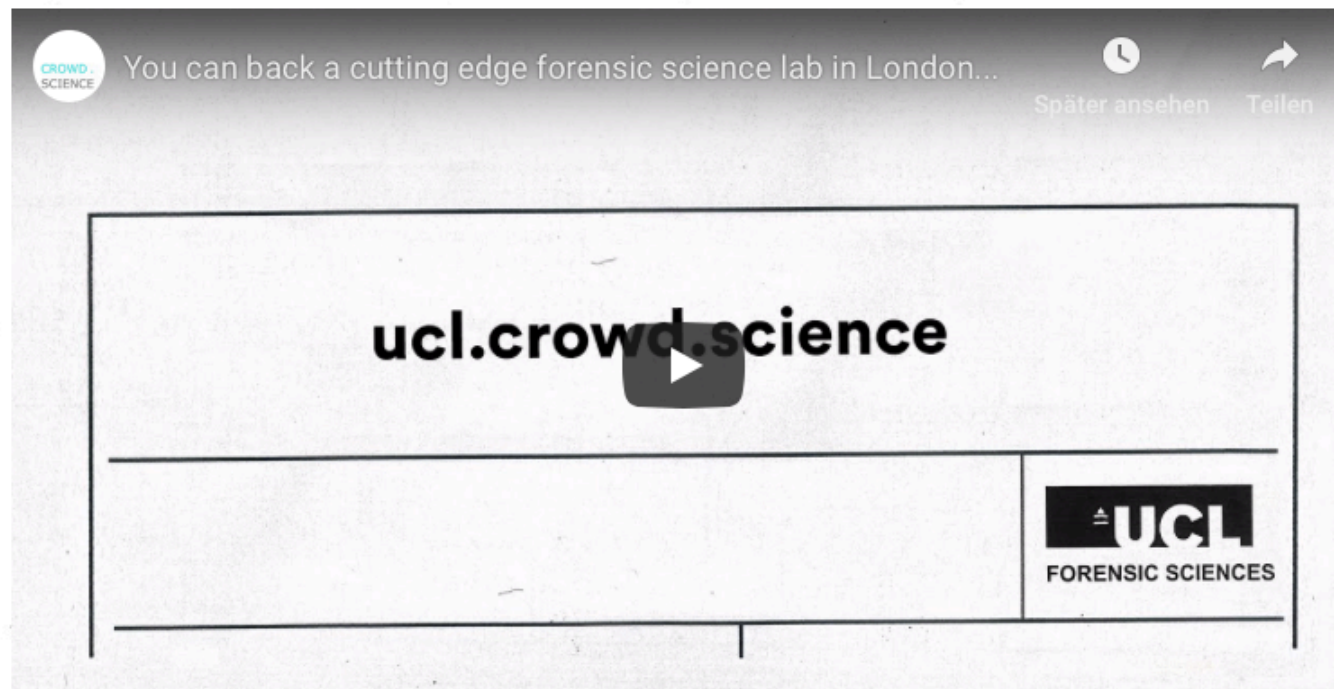
23.5.: UCL Open Science Day

# Crowdsourcing Science

**crowdsourcing**: outsourcing tasks to a distributed group of people

- funding
- idea generation
- data collection
- processing
- analyses
- documentation...

## Building a World Class Research Lab: Stop Miscarriages of Justice with Forensic Science



**£201,280.00**

PLEDGED OF £1,000,000.00 GOAL



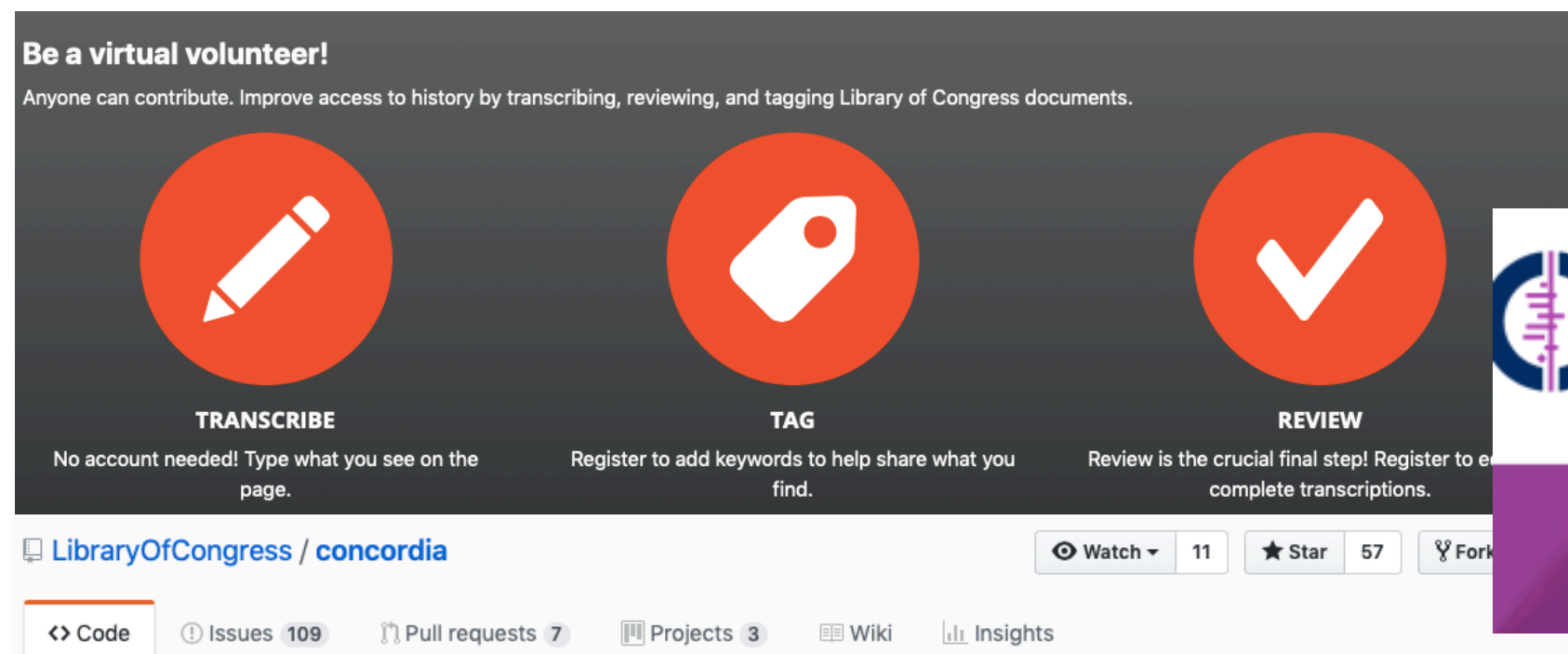
**92**

BACKERS

**CONTRIBUTE NOW**

# Citizen Science

- include the public in your research
- to review, tag, sort material; source information; for idea generation



Crowdsourcing platform for full text transcription and tagging. <https://crowd.loc.gov> <https://labs.loc.gov/>

[transcription](#) [volunteers](#) [loc](#) [crowdsourcing](#) [django](#)

# the Polymath Project

Tim Gower's blog: solving mathematical problems online



« Questions of procedure

Why this particular problem? »

## A combinatorial approach to density Hales-Jewett

Here then is the project that I hope it might be possible to carry out by means of a large collaboration in which no single person has to work all that hard (except perhaps when it comes to writing up). Let me begin by repeating a number of qualifications, just so that it is clear what the aim is.

1. It is *not* the case that the aim of the project is to find a combinatorial proof of the density Hales-Jewett theorem when  $k = 3$ . I would love it if that was the result, but the actual aim is more modest: it is *either* to prove that a certain approach to that theorem (which I shall soon explain) works, *or* to give a very convincing argument that that approach cannot work. (I shall have a few remarks later about what such a convincing argument might conceivably look like.)

# the Psychological Science Accelerator

- ‘a globally distributed network of psychological science laboratories (currently over 400), representing over 50 countries on all six populated continents, that coordinates data collection for democratically selected studies’
- a type of large-scale collaboration in which one or more research projects are conducted across multiple lab sites
- Advantages: larger sample sizes, more diverse/representative samples, enhance generalisation, transparency of research work flow and materials, makes science more collaborative and inclusive

# the Psychological Science Accelerator

- the PSA evaluates and selects proposed projects, refines protocols, assigns them to participating labs, aids in the ethics approval process, coordinates translation, and oversees data collection and analysis
- standing research teams rather than project-based collaboration



# Replication Initiatives

- The Many Labs projects
- The Crowdsourced Replication initiative
- The SCORE Project: Assessing and Predicting Replicability of Social-Behavioral Science Findings — you can join!

# Replication Initiatives

## SCORE Project

Create a database of about 30,000 papers published between 2009 and 2018 from 60+ journals in the social-behavioral sciences that publish primarily empirical, non-simulated research with human participants.

Sample about 3,000 papers from this population and code them using human and automated methods for primary claim, key design features, and key statistics, and merge data from other sources (e.g., altmetrics, citations, open data) to help assess the credibility of the original claims. Conduct replications (new data) or reproductions (reanalysis of original data) of up to 300 of these papers.

### **Criminology**

Law and Human Behavior

Criminology

### **WHAT RR TEAMS WILL GET OUT OF IT**

Beyond participation in perhaps the largest collaborative social-behavioral research project ever conducted, participating individuals and teams will:

- Receive a funding award to conduct the research
- Receive training and support for conducting open science best practice on conducting a replication or reproduction of published research
- Be free to publish the results of their replication or reproduction study
- Be co-authors on aggregate reports and publications of the overall findings across all replication and reproduction studies

# Q & A

- How could your research benefit from crowdsourcing?
- Do you know examples of other crowdsourcing initiatives in science?
- other comments and questions