Open Access

openRxiv labs

https://openrxivlabs.org

Try our first openRxiv Labs experiment: a new interactive reading experience with Curvenote Reader

Tracy Teal[1], and **Gabriel Stein**[1]

[1]openRxiv

openRxiv stewards one of the world's largest corpuses of biomedical preprints through bioRxiv and medRxiv. Growing directly from the strong foundation bioRxiv and medRxiv have built over the past decade, we wanted to create an experimental space for pushing the boundaries of research communication on top of this corpus of preprints, figures, metadata, and other research outputs. Last week we launched openRxiv Labs as a structured program for testing new and ambitious approaches to research communication.

Today we're excited to launch our first experiment, Curvenote Reader in openRxiv Labs—a new way to experience the 350,000+ preprints in our corpus. We are thrilled to partner with Curvenote, an organization that shares our commitment to open science and aligns with our Labs partner criteria on this first experiment.

Check out Curvenote Reader in openRxiv Labs! https://reader.openrxivlabs.org/.

Find a preprint through search, or use a DOI. The URL structure is the same as bioRxiv.

We're starting with bioRxiv preprints, offering readers the ability to explore references, terminology, expanded figures, and related works while staying in the context of the original preprint. Over time, we'll expand to include medRxiv preprints, iterate on the experience to allow interested authors to add even more interactive elements, and explore enriching the interface with additional features.

This experiment will allow us to test the hypothesis that preprints are most valuable when readers can easily find and explore the components that went into creating the narrative article — data, code, protocols, cited works, and beyond. We'll assess the progress of the pilot using aggregate, privacy-conscious measures such as time on page, engagement with interactive elements, click-throughs to supplementary and referenced works, and qualitative feedback from authors and readers.

In addition to offering a new reading experience, this experiment also allows openRxiv to explore the possibilities provided by maintaining an archive of structured data. A key part of enabling this experiment was the work the Curvenote team did to process our archive of JATS-format XML content into an early version of the Open Exchange Architecture (OXA), an open format more conducive to performant querying and web-native presentation, without requiring any additional work on the part of authors. Over time, we plan to leverage this structure to enable additional experiments with the reader experience, and create the capacity for new tool development. We'll also integrate linking to the Reader experience more directly in bioRxiv and medRxiv.

As with every openRxiv Labs experiment, we carefully vetted this opportunity to make sure it aligned with our criteria and operating principles. We were delighted to find in Curvenote a value-aligned partner who cares about open science, and open-source technology, as much as we do. We welcome feedback—in fact it's crucial since this is an experiment!—and invite you to join the experiment by visiting openRxiv Labs: Curvenote Reader. You can leave feedback by clicking on the icon at the bottom of every Reader page, logging an issue in the

Published Jun 11, 2026

Correspondence to
Tracy Teal
teal@openrxiv.org

project's open GitHub repository, or reaching out to hello at openrxiv.org if you're interested in getting more directly involved.

To follow along as we publish updates and results of the experiment, subscribe to our newsletter!