# POPROX Experimenter Intake Form

POPROX is a platform for experimenting with live delivery of news recommendations via email newsletter. Please consult the researcher documentation at <https://docs.poprox.ai/> for additional information.

Please fill out this form if you are interested in doing an experiment with POPROX. Email completed forms to [intake@poprox.ai](mailto:intake@poprox.ai) and one of our consultants will contact you within 1 week.

Date: 2/12/2025

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*(Optional) Other researchers involved in this project:*

Nick Hagar (nicholas.hagar@northwestern.edu)

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Categorize your primary area of research for this study:

\_X\_ Primarily algorithmic (e.g. testing one recommendation algorithm vs another)

\_\_\_ Primarily human-centered (e.g. testing people's reactions to news that they see)

\_\_\_ Primarily user-interface related (e.g. testing people's reactions to different ways of displaying news.)

What aspects of the news recommendations do you envision manipulating (check 1 and 2 if both apply)?

1. X The set of recommendations delivered and/or their ranking
2. X The way the recommendations are displayed or contextualized
3. ▢ I'm not planning on changing the news recommendations

What outcomes are you interested in measuring? (check all that apply)

1. X Study participants’ behavior (e.g. click-through of articles)
2. X Study participants’ subjective evaluations of newsletter / the recommended news articles
3. ▢ Characteristics of the recommended news articles
4. ▢ Characteristics of the study participants
5. ▢ Other: \_\_\_\_\_\_\_\_\_\_\_\_

(Optional) *Comments on research area*:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What research question(s) are you proposing to investigate with POPROX (Note: a good research question identifies a population, an intervention / exposure, a comparative or control condition, and a target outcome)?

Among email newsletter subscribers, does a large language model-powered personalization system, compared to a standard recommender system, lead to higher reader engagement as measured by click-through rates and survey feedback?

What is the theoretical rationale for your research questions and hypotheses?

Our work builds on several areas of research around news personalization and framing: 1) news readers demonstrate higher engagement with coverage that is personally relevant to them, 2) the way that news is presented (e.g., framing, writing style) interacts with reader behaviors and preferences to influence engagement, and 3) large language models show early promise for both identifying salient items in recommender system frameworks, and in adjusting the presentation of news coverage in ways that increase reader engagement. By combining these principles, we hypothesize that LLMs can enhance news personalization by both selecting relevant content and optimizing its presentation for individual readers at scale - capabilities that go beyond traditional recommender systems.

Do you have specific requirements for types of users in your study?

Our personalization approach requires users with historical click data (~1 month) to make recommendations. We do not have specific requirements around the characteristics of users for our study.

Why do you think that POPROX is a good environment for conducting this research?

POPROX helps us build on prior work testing our personalization pipeline in two key ways: 1) It provides greater ecological validity, allowing us to gauge reader responses in a real-world email newsletter context, with actual engagement history. 2) It affords us a way to conduct a valid A/B test, allowing us to assess the relative benefit of our personalization approach to a more established recommender system.

*(Optional) Do you have any publications around these or similar research questions? If so, list one or two below:*

*(Optional) Additional information that may be useful to understand your proposed experiment:*

We conducted a pilot study of our personalization approach and wrote up the results for the Generative AI in the Newsroom blog: <https://medium.com/generative-ai-in-the-newsroom/personalizing-newsletter-headlines-testing-llms-against-human-editors-6f14135089da>.