## Health and Science Research Request for Proposals

#### **TOPIC**

# Risk of Progression to Cigarette Smoking After Use of Electronic Nicotine Delivery Systems

**Issue date** Tuesday, May 16, 2023

Closing date Monday, July 10, 2023

Closing time 12 Noon - UK Time

**Submit proposals to** (See submission instructions in RFP)

Financing instrument Grant

Amount consistent with proposal and work plan. Paid

Financing amount

in US dollars

**Financing duration** Maximum of 18 months, consistent with proposal and work plan

Contact information <a href="mailto:support@smokefreeworld.org">support@smokefreeworld.org</a>

Please note that the following two requests for proposals (RFPs) are published together in this cycle, but are focused on distinct topics:

- The first RFP, *Risk of Progression to Cigarette Smoking After Use of Electronic Nicotine Delivery Systems*, seeks to examine the likelihood of combustible cigarette initiation after using electronic nicotine delivery systems (ENDS). This RFP was previously open <u>February 6 March 10, 2023</u>, and is being reopened for submissions.
- The second RFP, *Use of Electronic Nicotine Delivery Systems Among Youth*, seeks to investigate the initiation of ENDS use among young people.

## **Background**

A growing body of evidence shows electronic nicotine delivery systems (ENDS) to be less harmful alternatives to combustible cigarettes and a more effective tobacco cessation intervention than standard medications and services. <sup>1 2 3</sup> However, there is some concern among the public health sector that using ENDS may subsequently lead to the use of harmful tobacco products, such as combustible cigarettes. This phenomenon is commonly referred to as the "gateway theory," which postulates a causal progression from low-risk products (e.g., ENDS) to high-risk products (e.g., combustible cigarettes). <sup>4</sup> An alternative explanation for such a progression is provided by the common liability theory, which emphasizes the role of shared risk factors and predisposing characteristics that cause a range of health behaviors, for example, using both ENDS and combustible cigarettes. The common liability theory does not posit the initial use of ENDS as a cause of future smoking.

The scientific community is divided on the issue, as is the empirical evidence. Several studies have found a higher likelihood of combustible cigarette initiation in previously non-smoking ENDS users.  $^{5\ 6\ 7\ 8}$  However, other researchers have found no correlation, or negative correlation, between ENDS use and future smoking.  $^{9\ 10\ 11}$  Other studies have shown mixed or inconclusive results on the subject, with notable discrepancies in research conclusions derived from similar results.  $^{12\ 13}$ 

The scientific controversy over the verity of the gateway theory is rooted in the complexity of the subject and the associated empirical difficulty to determine a causal association between ENDS use and the later use of combustible tobacco products. Conceptual models underlying health behavioral choices such as ENDS and tobacco use, alcohol use, and drug use incorporate many different elements: biological factors, psychological and personality traits; economic influences and the social and policy environment.

Accordingly, the causes of a person's choice whether or not to use ENDS, or to undertake any specific health behavior, are many and often unobserved. Consequently, the empirical research on the gateway

theory is often descriptive and unable to adequately control for numerous confounding factors. External validity is also an issue, as many data sets and research settings use samples that are limited in size, by geography, or by other characteristics that make them unrepresentative of broader populations.

The Foundation for a Smoke-Free World ('the Foundation') is inviting proposals to conduct research projects that will provide novel and scientifically credible evidence on the relationship, if any, between ENDS use and the subsequent initiation of cigarette smoking.

## **Objective**

The Foundation will support hypothesis-driven research based on a well-specified conceptual model related to the gateway theory that will significantly advance knowledge. Studies may use primary or secondary data and a variety of methodological approaches. Priority will be given to analytical approaches, although studies likely to produce novel descriptive information that can be the foundation for subsequent research intended to identify causal relationships will also be considered. Applicants are expected to complete the research within the stipulated period.

Proposed research projects may include, but are not limited to, the following:

- Intervention studies that create plausibly an exogenous variation in ENDS or tobacco use that can be used to examine how this variation in use (e.g., ENDS) affects the use of the other (e.g., tobacco)
- Replication studies to assess the validity of findings from widely-cited salient studies of the
  gateway theory. Ideally, these studies would not only replicate the conducted analyses to assess
  flaws, but also highlight data and methods that could be used to correct common flaws in
  research on the gateway theory
- Analyses of secondary data (cross sectional or longitudinal) that can be used to exploit natural experiment, including public policies (e.g., taxes, regulations on sales) that change the use of

- ENDS or tobacco and that can be used to estimate the effect of that change on the use (e.g., ENDS) on the other product (e.g., tobacco)
- Descriptive studies that will produce novel information about ENDS and tobacco use. Examples
  would be studies that identify previously unknown longitudinal trajectories of ENDS and tobacco
  use, or studies providing new information about ENDS and tobacco use for important
  populations that have not been previously studied

The research approaches listed above are only a few examples of possible projects and are not exhaustive. The Foundation encourages applicants to propose innovative and creative research questions that will advance knowledge about the gateway theory.

The findings of funded research should be submitted to a peer-reviewed academic journal for publication. The applicant should establish a comprehensive plan to disseminate the new information through effective channels. The final product(s) should include suggestions for further action based on the findings and recommendations for future research areas.

### **Eligibility**

Eligible institutions include academic, health-related, research and science centers and institutions, and other collaborating centers and institutions with experience in related subject areas such as epidemiology, behavioral health, public health, or clinical studies. Research experience in addiction or tobacco use is desirable.

Proposals should be submitted by entities registered in their country of origin with an ability to accept research grants from not-for-profit foundations incorporated in the United States.

#### **Geographic Focus**

The focus of the work is global. Inclusion of low- and middle-income countries (LMICs) is encouraged.

## **Estimated Budget and Duration**

**Duration**: The scope of the proposed project should determine the project duration. Maximum duration not to exceed 18 months.

**Budget**: Application budgets consistent with proposal and work plan.

#### **Evaluation Criteria**

Applicants are advised to read and understand the <u>Foundation's strategic plan</u>. All study objectives must align with the Foundation's goals.

All proposals must describe how the research will make a novel contribution, the scientific plausibility of the research question, and the likely validity of the proposed methodology.

The following criteria will be used to evaluate submissions:

- The significance of the research question in the context of the gateway theory
- The innovation of the research strategy
- The scientific adequacy of the proposed data and methodology
- The expertise and prior experience of the applicant, including demonstrated experience on similar projects
- Adequate physical and intellectual resources to meet the objectives of the proposed research.
- Dissemination plans
- Cost vis-à-vis significance and contribution
- Key organizational documents provided to the Foundation as part of the due diligence process, as outlined in Grant Solicitation and Application Process

The Foundation will prioritize proposals that demonstrate a commitment to our values, including diversity, equity, and inclusion, and that provide the Foundation with the opportunity to interact with diverse teams, bringing a range of perspectives.

#### **Submission Instructions**

Applications should be submitted through the Foundation's online portal, which can be accessed <a href="here.">here.</a>
This link will start the new application form. Upon clicking the link, you will be prompted to log in, and then taken to the application form.

The application form has links to three templates, which are also listed here for your convenience:

- Proposal template
- Budget template
- Work plan template

You may save your application at any time by using the Save & Finish Later button at the end of each page. To return to an in-progress application, log in to the portal. A list of application portal FAQs can be found here.

If you have any technical issues, please contact the grants management team via <a href="mailto:support@smokefreeworld.org">support@smokefreeworld.org</a> and we will be happy to help.

## **Key Information**

The Foundation may disclose proposals, documents, communications, and associated materials submitted in response to this RFP to its employees, consultants, legal counsel, and contractors. The applicant should carefully consider the content of submitted materials if there is any concern about the impact of disclosure of confidential or proprietary information. Although submissions will not be disclosed publicly during the evaluation process, all funded projects (scoping and final awards) will be

made public. The Foundation will work with awardees to ensure that any materials made public will not disclose protected information.

To be considered for an award, the applicant agrees that the Foundation may:

- Amend or cancel the RFP, in whole or in part, at any time
- Extend the deadline for submitting responses
- Determine whether a response does or does not substantially comply with the requirements of the RFP
- Issue multiple awards

The applicant must ensure that it has responded to the RFP with complete honesty and accuracy. If information in the applicant's response changes, the applicant will supplement its response in writing with any deletions, additions, or changes within five days of the change. Any material misrepresentation, including omissions, may disqualify the applicant from consideration for an award.

#### **About Foundation for a Smoke-Free World**

The Foundation for a Smoke-Free World is an independent, US nonprofit 501(c)(3) private foundation with the purpose of improving global health by ending smoking in this generation. The Foundation focuses its grantmaking in three broad categories: health and science research, agricultural diversification, and industry transformation. Funded by annual gifts from PMI Global Services Inc. ("PMI"), the Foundation is independent from PMI and operates in a manner that ensures its independence from the influence of any commercial entity. Under the Foundation's Pledge Agreement with PMI and bylaws PMI and the tobacco industry are precluded from having any control or influence over how the Foundation spends its funds or focuses its activities. For more information about the Foundation, please visit <a href="https://www.smokefreeworld.org">www.smokefreeworld.org</a>.

#### References

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- <sup>4</sup> Shahab, L., Brown, J., Boelen, L., Beard, E., West, R., & Munafò, M. R. (2022). Unpacking the gateway hypothesis of e-cigarette use: The need for triangulation of individual- and population-level data. *Nicotine & Tobacco Research: Official Journal of the Society for Research on Nicotine and Tobacco, 24*(8), 1315–1318. <a href="https://doi.org/10.1093/ntr/ntac035">https://doi.org/10.1093/ntr/ntac035</a>
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