

# FSFW Health, Science, and Technology Request for Proposals

## TOPIC

### **COVID-19, Smoking, and Nicotine Research**

<b>Issue date:</b>	01 June 2020
<b>Closing date:</b>	15 December 2020
<b>Closing time:</b>	5pm UK Greenwich Mean Time
<b>Submit proposals to:</b>	See submission instructions in RFP
<b>Financing instrument:</b>	Grant
<b>Recommended amount:</b>	Scoping / pre-clinical studies: Up to US\$ 150,000 Epidemiological studies: Up to US\$ 250,000 Clinical studies: Up to US\$ 500,000
<b>Recommended duration:</b>	Scoping / pre-clinical studies: Up to 3 months Epidemiological studies: 3-6 months Clinical studies: Up to 1 year
<b>Contact information:</b>	For questions about the RFP: <a href="mailto:hst@smokefreeworld.org">hst@smokefreeworld.org</a> For administrative assistance: <a href="mailto:Support@smokefreeworld.org">Support@smokefreeworld.org</a>

## Purpose

The Foundation for a Smoke-free World is seeking to conduct research at the nexus of COVID-19, smoking, and nicotine that will require significant collaboration and research efforts with outside experts and organizations. We seek to advance knowledge of value to science and policy in these areas. The selected organization(s) will implement a range of projects relevant to the global pandemic, including well-designed and comprehensive pre-clinical, clinical, and epidemiological studies, to better understand the associations between smoking and / or nicotine use, and COVID-19 infection and outcomes.

## Introduction

The spread of COVID-19 has demanded that governments around the world take unprecedented steps to protect their citizens. This has meant restricting the movement of hundreds of millions of people around the world in an effort to limit the transmission of the disease. The situation has created unique challenges for people who are dependent on nicotine, including smokers, nicotine replacement therapy users, and users of alternative nicotine delivery products.

There is emerging evidence that both nicotine use and smoking status may have an impact on COVID-19 infection rates and hospitalizations, as well as disease severity and mortality. [\[i\]](#), [\[ii\]](#), [\[iii\]](#), [\[iv\]](#), [\[v\]](#), [\[vi\]](#), [\[vii\]](#) The under-representation of smokers in the available COVID-19 patient data, and potential selection and measurement biases within existing research outputs, requires well-designed epidemiological studies if we are to obtain clarity about the true nature and impact of relationships. There is both an opportunity and a challenge for individuals to quit smoking or transition to reduced risk nicotine products. Additionally, these circumstances offer a chance to initiate research that will have a lasting impact in the fields of tobacco cessation and harm reduction.

To address current knowledge gaps, this RFP seeks to accelerate research in the following areas:

- The impacts of tobacco and nicotine products on COVID-19 outcomes
- Opportunities for intervention to prevent or reduce COVID-19 infection, hospitalization, and disease progression
- Interventions to promote healthier lifestyles (including but not restricted to nicotine use) in the wake of the pandemic.

## Suggested Search Questions

The Foundation for a Smoke-free World plans to commission epidemiological, pre-clinical, and clinical research at the intersection of smoking and COVID-19 which may encompass some of the questions and research topics below. These questions are designed to be a guide only to this request for proposals. The Foundation will also consider proposals that answer research and innovation priorities, related to the impact of COVID-19, outside of this list.

### QUESTION 1

#### ***What is the relationship between smoking status and COVID-19 infection and/or outcomes?***

- The association between smoking and COVID 19 in relation to likelihood of infection, hospitalization, and severity of disease
- Testing of a representative population of smokers for COVID-19 development and severity
- Identification of other aspects of nicotine product use that may confer protection or harm and how these effects are asserted

### QUESTION 2

#### ***What is the relationship between nicotine and COVID-19 infection and/or outcomes?***

- In vivo and in vitro models addressing specific receptors and pathways by which the virus gains access to cells and/or leads to progressive disease
- Studies that would demonstrate mechanisms of action established with pre-clinical and population-based evidence

### QUESTION 3

#### ***What innovative interventions are required to ensure populations are able to adopt healthier lifestyle behaviors in the wake of COVID-19?***

- Interventions that use behavioral economic principles and interactive technologies to enhance physical activity and reduce smoking

## **Expected Deliverables**

- Final report detailing study findings
- Public dissemination of findings, including publication in academic journals, where relevant
- For scoping grants, it is expected that a full research proposal would be submitted to the Foundation upon project completion

## **Geographic Focus**

To maximize the chances of getting results fast, the Foundation is seeking to undertake work in settings with sufficient COVID-19 cases and where smoking/nicotine use rates are in excess of 25 percent of the population for men or women. Further, the Foundation will consider regions in which there are existing cohorts of smokers under observation for other reasons, where adding the above research plans are possible.

## APPLICATION INFORMATION

### **Expected Qualifications**

The Foundation encourages participation by groups whose work aligns with the Foundation's mission to eliminate smoking within a generation. These groups may include institutions of higher education, nonprofits, commercial enterprises, governmental agencies, or other research-based organizations.

Applicants should have a proven track record suitable for the area of research proposed. Previous research of tobacco and/or nicotine is appreciated but is not a requirement for funding.

Successful applicants will likely have an interdisciplinary group of key personnel who can approach this project from their individual fields of expertise (e.g. epidemiologists, clinicians, behavioral economists, basic scientists, and public health specialists).

The Foundation expects successful applicants to conduct research and publish findings according to Open Science principles, including: declaring hypotheses and proposed analyses up front; making raw data available for analysis; publishing all results, whether positive or negative; and publishing in journals that offer open access.

Applicants should be aware that the Foundation's [Initial funding](#) came from Phillip Morris International (PMI). The Foundation has a nonprofit status as a US [501\(c\)\(3\)](#) organization, and by [law and policy](#) must operate completely independently from PMI, and cannot engage in activities designed to support PMI's interests. Further, PMI can have no involvement or say in the Foundation's work.

### **Structure of Proposals**

All interested parties should submit a detailed proposal for work to the Foundation using the online application system. There is no page requirement for submissions, however the application form has links to three templates that must be fully completed for an application to be considered. Applicants will also have the option to upload additional relevant documentation.

The templates, including the required information, are linked below for your convenience.

- [Proposal template](#)
- [Budget template](#)
- [Work plan template](#)

## Evaluation Criteria

The following criteria will be used to evaluate submissions:

- Expertise and prior experience including demonstrated ability to perform on similar projects
- Probability of meeting the objectives of the RFP
- Cost and timeline
- Key organizational documents provided to the Foundation as part of our due diligence process, as outlined in our [Grant Policies and Procedures](#)

## Submission Instructions

The Foundation's application portal will open at 12 Noon UK GMT on 1st June 2020 and close at 12 Noon UK GMT on 15<sup>th</sup> December 2020. In order to capture studies addressing various timeframes within the COVID-19 pandemic cycle, the Foundation will review and evaluate submitted proposals monthly until closing.

All applications should be submitted through our online portal. Applicants will be prompted to log in or create an account first. Please use [this link](#) to start a new application. Applicants may save a started application at any time by using the 'Save & Finish Later' button at the end of each page. Please use [this link](#) to return to the log-in screen to access the saved form.

A list of FAQs can be found [here](#).

For all other portal access inquiries, please contact us at [support@smokefreeworld.org](mailto:support@smokefreeworld.org). Enquiries will be responded to within 48 hours.

## KEY INFORMATION

The Foundation may disclose proposals, documents, communications, and associated materials submitted in response to this RFP to its employees, consultants, legal counsel, contractors, and potential co-funders. Applicants should carefully consider the content of submitted materials if they have any doubt 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 any 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

Applicants must ensure that they have 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 changes. Any material misrepresentation, including omissions, may disqualify an applicant from consideration for an award.

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<sup>[i]</sup> Simons, S., *et al.* (2020). The association of smoking status with SARS-CoV-2 infection, hospitalization and mortality from COVID-19: A living rapid evidence review. *Qeios*. Doi:10.32388/UJR2AW

<sup>[ii]</sup> De Lusignan, S., *et al.* (2020) Risk factors for SARS-CoV-2 among patients in the Oxford Royal College of General Practitioners Research and Surveillance Centre primary care network: a cross-sectional study. *Lancet Infect Dis*. Doi: 10.1016/S1473-3099(20)30371-6.

<sup>[iii]</sup> Farsalinos, K., Barbouni, A., Niaura, R. (2020). Smoking, vaping and hospitalization for COVID-19. *Qeios*. Doi: 10.32388/Z6908A.13.

<sup>[iv]</sup> Gonzalez-Rubio, J., *et al.* (2020). What is happening with smokers and COVID-19? A systematic review and a meta-analysis. *Preprints*. Doi: 10.20944/preprints202004.0540.v1

<sup>[v]</sup> Williamson, E., *et al.* (2020) OpenSAFELY: factors associated with COVID-19 related hospital death in the linked electronic health records of 17 million adult NHS patients. *medRxiv*. Doi: 10.1101/2020.05.06.20092999.

<sup>[vi]</sup> Farsalinos, K., Angelopoulou, A., Alexandris, N., Poulas, K. (2020) COVID-19 and the nicotinic cholinergic system. *Eur Respir J*. Doi. 10.1183/13993003.01589-2020.

<sup>[vii]</sup> Farsalinos, K., *et al.* (2020) Molecular modelling and docking experiments examining the interaction between SARS-CoV-2 spike glycoprotein and neuronal nicotinic acetylcholine receptors. *Preprints*. Doi: 10.20944/preprints202005.0365.v1.