LSHTM Ethics Application & CARE Form

Project Information

Staff members/students based at:

- (•) LSHTM
- ( ) MRC Gambia@LSHTM
- ( ) MRC Uganda@LSHTM

1. Full project title

Forecasting of COVID-19 using human predictions

2. Is this Project in fulfillment of a degree?

(•) Yes ( ) No

2a. Degree registered for

PhD

2b. Have you completed upgrading?

- ( ) Yes
- (•) No

2b (ii). If you have not yet completed upgrading, please state when upgrading is likely to take place, as well, detail why you are submitting to the ethics committee at this stage.

Upgrading should take place mid-2021.
We are submitting the form at this point as Covid-19 forecasts are relevant now and we are already prepared to start the project at this time.

2f(deg). Is this an original submission, or are you responding to a request for clarification from the LSHTM ethics committee?

- ( ) Original submission
- (•) Responding to request for clarification

2f(i-deg) Please upload a covering letter responding to the committee's request for clarification (please use the same format as that shown in the template cover letter available under Help-Templates). Please upload all amended documents in the relevant section of the form.

Documents

Type	Document Name	File Name	Version Date	Version	Size
Covering Letter	Cover Letter Ethics	Cover Letter Ethics.docx	05/11/2020	1	10.2 KB

Applicant Details

3d. Department of LSHTM Lead Investigator

Department of Infectious Disease I

Student Details

3a. Student details

Title	First Name	Surname
Mr	Nikos	Bosse

Telephone: +4917680165076

Email: nikos.bosse@lshtm.ac.uk

3c. Supervisor's name.

Sebastian Funk

3c (i). Supervisor's email address (if more than one, please only provide the email address of your main supervisor)

Email: sebastian.funk@lshtm.ac.uk

3 c(ii). Supervisor's institution

- (•) LSHTM
- ( ) MRC Gambia or Uganda
- ( ) Other

3e. Supervisor status

Confirmed

Project Type

Note: Completing the filter will enable and disable sections of the form so you may not see all questions.

4. Does the research involve primary data collection, analysis of data/samples that have already been collected, or a mix of both?

- (•) Primary
- ( ) Previously collected data/samples
- ( ) Mixed

4a. Is this research project classed as interventional or observational?

- ( ) Interventional
- (•) Observational

4a(ii). Select type of project:

Project involving mixed methodology (mix of qual/quan/lab etc.)

4c. Does the project involve extraction of data from patient records (e.g. medical, social care, service user records)? (This refers to primary data collection from records and does not include data that was previsously collected and is now being used in a secondary analysis).

- ( ) Yes
- (•) No

6. Does this project require review by the Commercialisation and Rapid Response (CaRR) ethics committee? (please see info icon for the remit of this committee)

- (•) Yes
- ( ) No

To allow the CaRR committee to triage and review the application as quickly as possible, please ensure you answer the following questions as accurately as possible:

1. Which local/regulatory approvals are required to carry out this work? (Q65-69 local approval section)
2. Where are you in the process of obtaining these local approvals? (Q65-69 local approval section)
3. Have you included in your application the report of an independent scientific review? Please note this is required for ethics approval and that this can be conducted in parallel to the ethics review. (Q47 funding section).
4. Based on the answer to Q2, when are you realistically able to go ahead with the project? (Q23 methods section)

Samples

6a. Does this research project involve the collection, or use of previously collected, human tissue samples e.g urine, stool, blood etc? (Please select yes even if the samples are not considered relevant material under the Human Tissue Act)

- ( ) Yes
- (•) No

6b. Will this project involve living animals (either laboratory, livestock or wild animals) AND/OR biological material that has been obtained from animals in the experiments planned?

- ( ) Yes
- (•) No

Fast-Track

7a. Will this project be conducted in conjunction with NHS staff, premises or any other connection to the NHS?

- ( ) Yes
- (•) No

7b. Is this application for fast-track? Note: MSc applications are not currently available for fast-track

- ( ) Yes
- (•) No

Vulnerable Groups

8(i). Does this research project involve vulnerable groups? Vulnerable groups include: children, individuals with mental disability or learning difficulties, pregnant women, prisoners etc (see information icon for full description).

- ○ Yes
- ◉ No

Security Sensitive Research Material

9. Does this research involve access to and/or storage of security sensitive research material? Please note that while some data is considered sensitive, such as HIV status, it is not necessarily considered security sensitive. If you are using data that could be considered sensitive, but not security sensitive please answer no to whether your research involves access to and/or storage of security sensitive research material. Please see information icon for what is considered security sensitive material.

- ○ Yes
- ◉ No

Geography

10. List the countries where the research project is to be conducted (For example: if you are conducting a secondary data analysis for your project and you will be based in the UK, select UK regardless of where the original data has come from):

United Kingdom

Please be aware that all primary health research conducted in the UK requires a sponsor. Please contact the RGIO at RGIO@lshtm.ac.uk for more information on sponsorship.

Outline

Note: Please do not copy and paste directly from the protocol. Applications where large portions of text have been copied and pasted directly from the protocol, and therefore do not properly answer the question, will be invalidated

12. Give an outline of the proposed project, including background to the proposal. Include information from any systematic reviews that have been conducted. Sufficient detail must be given to allow the Committee to make an informed decision without reference to other documents.

The primary aim of this study is to collect predictions from experts in epidemiology and infectious diseases as well as non-experts about key characteristics of the COVID-19 outbreak. To that end, experts and non-experts are asked to make short-term forecasts of Covid-19 case and death numbers using a web app. These forecasts allows to use information and resources not readily available to computer models such as knowledge about future planned policies. They also allow research into how human forecasters compare to mathematical models in terms of performance on short-term forecasts.

This study is focusing on Germany and Poland for now to make a contribution to an ongoing research project by the German Forecast Hub (https://kitmetricslab.github.io/forecasthub/forecast, https://osf.io/cy937/registrations). We were asked by the German team to contribute to the Forecast Hub and would like to use this as an opportunity to compare human forecasters against computer models. Part of that involvement has to do with the fact that two of the investigators (Sebastian Funk and Nikos Bosse) are German and know the German researchers, but the group is also contributing (computer-generated models) to other international efforts like the US Forecast Hub (https://github.com/reichlab/covid19-forecast-hub). At a later point we would also like to set up a similar human expert project for the UK.

12a. Upload the study protocol (compulsory for staff and doctoral students), including data collection forms, questionnaires and topic guides. Please upload each document separately, ensuring that the date and version number of each document is correct.

Documents

Type	Document Name	File Name	Version Date	Version	Size
Protocol / Proposal	Human Forecasting Study Protocol	Human Forecasting Study Protocol.docx	09/10/2020	1	1.8 MB
Protocol / Proposal	Human forecasting protocol	Human forecasting protocol.docx	05/11/2020	2	2.4 MB

13. State the intended value of the project, detailing why the topic is of interest or relevance. If this project or a similar one has been done before what is the value of repeating it? Give details of overviews and/or information on the Cochrane database. This area is of increasing importance – please ensure you give a full response.

One of the challenges of the COVID-19 pandemic is the uncertainty about many of the key epidemiological parameters and, in turn, the current state and future trajectory of the outbreak. Currently, mathematical models are predominantly used to estimate the current and near-future state of the outbreak in various different countries. Mathematical models, however, are limited by the quality and availability of data and may not take into account all sources of information (e.g. recent government announcements or newly-released scientific studies). Eliciting forecasts from human forecasters is one way in which estimates may be able to incorporate newly-available information in real time.

Forecasts from human forecasters will be aggregated and submitted to the German Forecast Hub (https://github.com/KITmetricslab/covid19-forecast-hub-de) and possibly to the US Forecast Hub (https://github.com/reichlab/covid19-forecast-hub) and similar projects to help inform important policy decisions. This is a unique and novel contributions as none of the models previously registered make use of human forecasters.

The project also allows more research into how we can best improve human forecasters. We aim to show forecasters different baseline models to investigate how anchoring affects human forecasters.

15. Overall aim of project

The primary aim of this study is to collect predictions from experts in epidemiology and infectious diseases as well as non-experts about the short-term trajectory of Covid-19.

16. Specific objectives of project

The data collected through this study will serve three outcomes.

Firstly, short-term forecasts will be used to contribute forecasts to research institutions like the German Forecast Hub (https://github.com/KITmetricslab/covid19-forecast-hub-de), representing an alternative approach to existing mathematical models.

Secondly, we intend to use the collected forecasts to investigate how baseline models change human forecasts.

Finally, results from this study can inform whether expert elicitation can be a useful tool to support public health decision making during infectious disease outbreaks.

At a later point we would like to expand this project to expert forecasting in the UK, but this is not currently the main objective.

Methods

Note: Please do not copy and paste directly from the protocol. Applications where large portions of text have been copied and pasted directly from the protocol, and therefore do not properly answer the question, will be invalidated

18. Specify the procedures/methodology to be conducted during the project. Please include outcome measures and plans for data management and analysis. For literature reviews, include details on search strategy, search terms, inclusion and exclusion criteria.

Participants are invited via a link to complete a weekly survey using a web app. The app asks users to provide a predictive distribution for Covid-19 case and death numbers in multiple locations (Currently planned are Germany and Poland).

We expect experts to make up a large fraction of respondents, but really everyone who has an interest in joining this effort is invited to participate. Given this project will be approved we intend to do the following (or similar things) to invite participants
- invite members of the CMMID through Slack to participate
- circulate this among other teams contributing to the German (and possibly) US Forecast Hub
- Sending a link to the app to other research groups like the Newton Institute that might be interested
- inviting friends who may be interested to join
- making a post on Twitter / Reddit / facebook / on blogs about the project and invite participation

We think of this process as a rather informal invite of anyone who may be interested to join, so we may not tell in advance who exactly will participate.

In order to use the app, users must create a simple user account. The minimum information needed is a username and a password. Participants are encouraged to share their name as well as their e-mail address so that we can contact them with questions and send a weekly reminder to complete the survey. This, however, is not required and participants are also allowed to provide a fake name and no e-mail address. If they wish, participants can have their username appear on a performance board to obtain feedback on their performance. Weekly reminders will be sent as long as the project continues or if requested otherwise by a participant.

Submitted responses will be saved in a Google Sheet stored in a Google Drive folder that only the aforementioned investigators have access to. Responses will be stored in two separate sheets: The sheet with that holds the forecasts will not include the forecasters name, but instead only a random unique forecaster ID. A second sheet will hold the personal information (name, email address, institutional affiliation) as well as the encrypted password and the random unique forecaster ID. Whenever we process the data in any way, the random forecaster ID will be used to respect the user's privacy. Forecasts will be removed from Google Drive once a week and stored on LSHTM hard drives. Pseudonymised forecasts may be made available to others through sites like Github. We will not share participants' personal data under any circumstances. Participants will be asked for their explicit consent when they create a user account and can have their data deleted upon contacting us.

Data management will follow the LSHTM Confidentiality and Anonymisation of Research Data SOP (LSHTM-SOP-036-01). The data will be stored in a secure drive on with access held only by the investigators. Individual-level data will be pseudonymised and identified with a unique participant ID; information linking participants' ID number to their identity (names, emails, institution, or other identifying information) will be stored separately and will remain private.

Processing and analysis of the pseudonymised data will be performed using the statistical programming language R. Individual estimates will be pseudonymised and identified by a unique participant ID. Forecasts will be aggregated using different methods, e.g. a median ensemble or a perfomance-weighted ensemble. Different aggregation techniques will be tested to learn more about their performance. Aggregated forecasts will be submitted to the German Forecast Hub (https://github.com/KITmetricslab/covid19-forecast-hub-de) and possibly similar institutions.

Forecasts will be scored and evaluated using metrics like the weighted interval score once ground truth data becomes available. These metrics are already implemented in R packages developed by the research team. Performance will be published on a leader board, where those participants who provided a name to appear on the leader board can learn about their performance.

20. Please specify the total number of participants to be recruited into the research project.

We aim to enroll a minimum of 20 participants initially, but will continue to recruit new experts throughout the process.

20a. Please provide the scientific justification for the sample size. Please include justification for the age, gender, source and method of recruiting participants for the research project.

The minimum number of experts required for a robust expert elicitation procedure is generally cited as being between 5 and 20, but we should also account for the fact that participants may not complete the study every week, as well as attrition of participants over the course of the study.

23. Proposed start date of the project

24/10/2020

24. Proposed end date of the project

31/10/2021

Risks and Discomforts

29. Give details of all clinical and non-clinical procedure(s) that will be received by participants as part of the research protocol. Non-clinical procedure(s) can include seeking consent, interviews, non-clinical observations and use of questionnaires. Clinical procedure(s) can include uses of medicinal products or devices, other medical treatments or assessments, mental health interventions, imaging investigations and taking samples of human biological material. Include procedures which might be received as routine clinical care outside of the research.

none

29a. Please provide details of who will conduct the procedure, the average time taken per procedure (minutes, hours or days) and where it will take place.

The study will be conducted via an online survey. The study will be longitudinal, with participants being asked to complete one survey per week, and each survey will take approximately 5-10 minutes to complete. The survey will be conducted using a R shiny web app.

29b. State the potential discomfort, distress or hazards that research participants may be exposed to (these may be physical, biological and/or psychological) as a result of all procedure(s).

None

29c. What precautions are being taken to control and modify these? Include information on hazardous substances that will be used or produced, and the steps being taken to reduce risks.

NA

Experience

30. State the personal experience of the applicant and of senior collaborators in the research project in the field concerned, and their contribution to this project. Indicate any previous work done related to the project topic including student and/or professional work, or publications

All members of the research team have experience in the field of infectious disease epidemiology and mathematical modelling of infectious diseases. The team is working with guidance from collaborators in the United States of America who are conducting similar work on influenza-like diseases in the USA.

30a. Upload the CVs for all main investigators working on the project. For MSc students, please upload your CV only.

Documents

Type	Document Name	File Name	Version Date	Version	Size
Investigator CV	joel	joel.docx	08/10/2020	1	15.7 KB
Investigator CV	james	james.doc	08/10/2020	1	70.0 KB
Investigator CV	kath	kath.pdf	08/10/2020	1	138.6 KB
Investigator CV	nikos	nikos.pdf	08/10/2020	1	69.9 KB
Investigator CV	sam	sam.pdf	08/10/2020	1	53.7 KB
Investigator CV	seb	seb.pdf	08/10/2020	1	79.6 KB
Investigator CV	sophie	sophie.pdf	08/10/2020	1	52.4 KB
Investigator CV	robin	robin.pdf	09/10/2020	1	252.4 KB

30e. Have the main investigators undertaken any Research Ethics/Human Subjects Protection training (either online or face to face)? (links to online training can be found in the information icon)

- (•) Yes
- ( ) No

30e(i). Please upload a copy of the certificate(s) (if available)

Documents

Type	Document Name	File Name	Version Date	Version	Size
Other	citi_completion_report	citi_completion_report.pdf	16/10/2020	1	129.2 KB

Informed Consent - Primary

If any photographs are to be taken, whether for teaching or research purposes, ensure that the participant's consent to their use has been given in line with the provisions in British Medical Journal, 1998, 316, 1009-1011.

32. Who will be responsible for taking consent and what training/experience do they have?

Nikos Bosse (nikos.bosse@lshtm.ac.uk) is responsible for the data collection and designed the consent form. Nikos has received training on the ethics of conducting scientific research in a course taken at the Universiy of Göttingen, Germany.

32a. Will you be obtaining written consent?

- (•) Yes
- ( ) No

32a(i). State the manner in which consent will be obtained (how and from whom). Where appropriate, state how the information and consent form will be translated into local languages.

Users will be asked to consent to the following form when they sign up by pressing a button "I understand and consent".

32b. Do you expect any of your potential participants to be illiterate?

- ( ) Yes
- (•) No

32f. Please upload the information sheet(s) and consent form(s). Please upload each document separately, ensuring that the date and version number of each document is correct.

Documents

Type	Document Name	File Name	Version Date	Version	Size
Information Sheet	Consent Form	Consent Form.docx	05/11/2020	1	9.9 KB

32g. Upload recruitment procedures (eg advertisements, emails, posters). Please upload each document separately, ensuring that the date and version number of each document is correct.

Documents

Type	Document Name	File Name	Version Date	Version	Size
Advertisements	Recruitment Procedures	Recruitment Procedures.docx	05/11/2020	1	7.1 KB

Payments

37. Will payments be made to participants? These should usually not be for more than travelling expenses and/or loss of earnings and must not represent an inducement to take part.

- ( ) Yes
- (•) No

Confidentiality & Data

39. Specify how confidentiality will be maintained with respect to the data collected. When small numbers are involved, indicate how possible identification of individuals will be avoided. Where data will be anonymised, specify how this will be done.

Individual-level data will be pseudonymised and identified with a unique random participant ID. For all outward facing publication of forecast we will only use the random participant ID to identify forecasters. Information linking participants' ID number to their identity (name and e-mail if provided by the forecaster) will be stored separately to the main data and will remain private.

We do not expect small participant numbers to be a concern in this study as participants can very easily enter. If we see that participant numbers are low we can artificially increase numbers by creating numerous toy forecasts with a set of participant IDs only known to us. This will prevent anyone from identifying participants who do not wish to be identified.

It is, in principle conceivable that someone can link a name published on a leader board to the random participant ID based on performance. We do, however, not believe that this of great concern. If a participant chose to have their username published on the leader board their identity is already somewhat public. If the participant chose to provide a fake name, then the only connection that can be made is between a fake name and a random participant ID - none of these contain any private information on individuals.

40. State how your data will be stored and what will be done with it at the end of the project.

Data management will follow the LSHTM Confidentiality and Anonymisation of Research Data SOP (LSHTM-SOP-036-01). Data that is submitted through the web app will be stored on a Google Sheet in a Google Drive folder only accessible to the investigators. Data that identifies forecasters will be stored separately from the forecasts.

Once a week forecasts will be cleared from the Google Drive folder. Pseudonymised forecasts will then be stored in a repository on github.com.

All e-mail communication (weekly reminders) will be conducted using the e-mail address "nikos.bosse@lshtm.ac.uk". Trace of the e-mail communication will be deleted after every weekly reminder. For any other inquiries and communication with participants, mails will be deleted after the purpose of that communication has been fulfilled.

All personal data (name, e-mail address) will be deleted at the end of the research project. Participants can request the deletion of all personal information at any time.

41. Are there plans to share the data, or add the data to a repository in the future?

- (•) Yes
- ( ) No

If yes, please be aware of the following:

Explicit consent should be obtained from participants regarding the possible use of their anonymised data in the public domain via a data repository.

42. How will the data be shared and what safeguards are in place to ensure the use of the data is for valid research?

The data will be shared in the interest of open science and reproducibility through github.com. Aggregated forecasts will be shared with the German Forecast Hub and possibly other Forecast Hubs.

We do not expect potential misuse of data to be of major concern.

Funding

46. Do you have external funding for this project?

- (•) Yes
- ( ) No

46a. Please provide the Letter of Intent reference number

626IDE

46a(i). Please provide the name of the funder

Wellcome Trust

46a(ii). Please include details of the funding available for this project.

Senior Research Fellowship to Sebastian Funk.

Date grant accepted or funding agreed:

06/08/2018

Date end of funding:

31/03/2020

46c. Are you in receipt of any funding from the United States? Or will you be collaborating with (or with individuals from) a US Institution/organisation?

- ( ) Yes
- (•) No

47. Has the project been sent out for peer/independent scientific review (please select yes if the project is being sent to the SCC)?

- ( ) Yes
- (•) No

47a. If no, why has the project not been sent peer/independent scientific review?

This is a rapid data collection as part of the response to COVID-19. The methodology will be subject to extensive review internally.

49. Does the Chief Investigator or any other investigator/collaborator have any direct personal involvement (e.g. financial, share holding, personal relationship etc.) in the organisations sponsoring or funding the research that may give rise to a possible conflict of interest?

- ○ Yes
- ◉ No

50. Will individual researchers receive any personal payment over and above normal salary, or any other benefits or incentives, for taking part in this research?

- ○ Yes
- ◉ No

Local Approval

66. For all countries listed in Q9, please provide details of the arrangements being made to obtain local ethical and/or regulatory approval. Please electronically append copies of local approval letter(s) where this has already been obtained. Where you believe local approval is not required, please explain why not and describe any less formal permissions, invitations or support you are being given for this work. Upload local permission letters as applicable. (Where the research is to take place overseas, ethical approval must be obtained in the country(s) concerned. Approval from the LSHTM Committee is dependent on local approval having been received. You MUST NOT start your project until all relevant approvals are in place.)

None required

66a. Where the research is taking place in the UK, please list other UK Committees (including other LSHTM ethics committees) from which approval is being, or has been, sought.

None required

DPIA Screening

132. Does your research involve the processing of identifiable data in the UK at any stage? (for the purposes of this question pseudo-anonymised data is still considered identifiable. Please see the information icon for additional information on the anonymisation of data.)

- ◉ Yes
- ○ No

133. Have you already/will you be carrying out a Research Data Protection Impact Assessment for your project? (please see information icon for guidance on when a DPIA is required)

- ○ Yes
- ◉ No

134. Why have you not/are you not planning to carry out a Research Data Protection Impact Assessment for your project?

- ○ A DPIA is not required
- ◉ Unsure of whether a DPIA is required

If you are unsure of whether a DPIA will be required for your project please answer the questions below. If you answer Yes to one or more of the below questions a DPIA may be required for your project and you should contact the Schools Data Protection Officer (DPO) for further advice. The DPO can be contacted at DPO@lshtm.ac.uk

136. Does your research project involve data relating to vulnerable individuals (for example, children or vulnerable adults?

- ○ Yes
- ◉ No

137. Will your research project involve the use of biometric data or genetic data?

- ○ Yes
- ◉ No

138. Will your research project involve the processing of personal data on a large scale?(please see information icon for more information)

- ○ Yes
- ◉ No

139. Will your research project involve the evaluation or scoring of personal data, including profiling and predicting, in particular relating to aspects concerning individuals' performance at work, economic situation, health, personal preferences or interests, reliability or behaviour, location or movements (for example, genetic testing)?

- ○ Yes
- ◉ No

140. Will your research project involve the systematic monitoring of individuals, including in a publicly accessible area?

- ○ Yes
- ◉ No

141. Does your research project involve the use of innovative technology or the novel application of existing technology (including artificial intelligence, machine learning, deep learning, etc)?

- ○ Yes
- ◉ No

142. Will your research project involve making decisions about, or taking actions against, individuals by automated means which might produce legal effects concerning them, or similarly significantly affect them through decisions made?

- ○ Yes
- ◉ No

143. Will your research project involve the processing of personal data which may result in preventing individuals from exercising a right or making decisions about individuals' access to a product, service, opportunity or benefit (including e.g. treatment)?

- ○ Yes
- ◉ No

144. Does your research project involve data matching i.e. combining, comparing or matching personal data obtained from multiple sources?

- ○ Yes
- ◉ No

145. During your research project, will you be processing personal data that have not been obtained direct from the individuals and the individuals concerned will be unaware that LSHTM is collecting and using their personal data?

- ○ Yes
- ◉ No

146. Does your research project involve tracking individuals' geolocations or behaviour, including but not limited to, the online environment?

- ○ Yes
- ◉ No

147. Does your research project involve the processing of personal data which is of such a nature that a personal data breach could jeopardise the physical health or safety of individuals?

- ○ Yes
- ◉ No

Reminder: If you have answered Yes to one or more of the above questions you should contact the DPO at DPO@lshtm.ac.uk for further advice regarding whether a DPIA is required for your project.

Signature Instructions

The form should be completed and finalised prior to signing or requesting signatures. Students should ensure that the Supervisor signs prior to the Course Director/Project Module Organiser. For external supervisors, please ensure that they have registered for an account prior to requesting the signature.

Signature - Applicant

Student Declaration

- ☑ I have read and understood, and agree to abide by the LSHTM Good Research Practice policy as well as all applicable Standard Operating Procedures, including on informed consent
- ☑ I undertake to abide by all regulations, guidelines and standards of good practice, including but not limited to the Data Protection Act 2018, GDPR, and the Declaration of Helsinki
- ☑ I undertake to abide by all local rules/laws for non-UK research
- ☑ I agree to conduct my project on the basis set out in this form, and to consult staff (initially, my Supervisor) if making any subsequent changes
- ☑ I agree to inform the ethics committee of any changes made to this form, and will not implement any changes until approval from the ethics committee has been received
- ☑ I undertake to adhere to all conditions set out by review bodies in giving approval and will not start the project until all required approvals are in place
- ☑ I agree to comply with the relevant safety requirements, and will submit a separate request for LSHTM travel insurance where relevant
- ☑ I agree to inform the Faculty Safety Officer and/or the Off-Site Safety Advisor (as required) if there are any changes to the risk assessment
- ☑ I confirm that there are no conflicts of interest that preclude my participation in the project

Signed: This form was signed by Mr Nikos Bosse (nikos.bosse@lshtm.ac.uk) on 05/11/2020 8:44 PM

Signature - Supervisor

Supervisor signature

I declare that:

- I agree that the information submitted in this application is a reasonable summary of the proposed project.
- I agree that this form correctly indicates whether or not ethics approval will be required.
- I agree that this form contains adequate information for the ethics committee to form an opinion of the proposed project.
- I agree that all required supporting documentation is attached to this application.
- (For MSc projects only) I agree that responses in the Risk Assessment section address the main risks connected with a project of this nature
- I have reviewed the risk of the project, including travel, and agree that it is an acceptable risk to the student
- I confirm that there are no conflicts of interest that preclude my role as supervisor for this project
- I Have read and understood, and agree to abide by the LSHTM Good Research Practice policy

Signed: This form was signed by Dr. Sebastian Funk (sebastian.funk@lshtm.ac.uk) on 05/11/2020 9:20 PM

Signature - Other

Note:

The form will automatically submit upon receipt of all required signatures.

After submission, you will receive a confirmation email with further details.

If you have not received a confirmation email within 5 working days please email ethics@lshtm.ac.uk (staff) or MScethics@lshtm.ac.uk (students) to check the status of your submission.