

Evidence Synthesis Project Work Agreement

Project (working) title: COVID-19 Rapid Antigen Tests Diagnostic Accuracy Systematic Review and Meta-Analysis

Faculty Members: Faculty names

Trainees: Student names

Updated: Feb 2023

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Background

This project is a systematic review to answer the question “What is the diagnostic accuracy of the currently available and upcoming POC RATs used in primary care settings relative to the viral genetic RT-PCR test as a reference for the diagnosis of COVID-19/SARS-CoV-2 in adults?”

Systematic Reviews require a significant amount of time and effort that can be done asynchronously and in any location. Patience and consistency are the keys to completing a high-quality evidence synthesis project in a timely manner.

This Work Agreement outlines the project progress, roles and responsibilities of individuals working on this project, and the projected timelines and milestones for completion of the project. It is intended to be a collaborative living document that is updated as needed and with input from all team members. All individuals agree to abide by the stipulations in this document as project team members.

Progress to Date

This project has a published protocol that can be found here ([DOI: 10.11124/JBIES-20-00561](https://doi.org/10.11124/JBIES-20-00561)). The pilot search was completed in July 2021 with the identified studies used to test out the screening and data collection processes/procedures. The final search was completed July 2022. We have finished title/abstract screening and full-text screening. The next steps are critical appraisal and data collection.

Definitions

Research team – the students, faculty, staff and other persons working on this project

Author – the named individuals for authorship credit on any published work derived from this project

Roles – The task groupings with each team member being assigned one or more roles

Responsibilities – the tasks, etc that should be completed by individuals with the specified roles

Roles

Faculty

Amy Stone, PhD – lead investigator, senior author

Megan DeArmond, MLIS – co-investigator, lead librarian, author

Sherli Koshy-Chenthittayil, Ph.D. – co-investigator, lead data scientist, author

Faculty Name – co-investigator, author

Faculty Name – co-investigator, author

Faculty Name – co-investigator, author

Trainees

Student Name – Screening and Data collection, author

Student Name – Screening and Data collection, author

Student Name – Screening and Data collection, author

Student Name – Screening and Data collection

Student Name – Screening and Data collection

Responsibilities

Everyone

- 1) Communicate with the other team members about the project progress, successes and challenges
- 2) Professional behavior towards each member of the research team
- 3) Complete assigned tasks on time or, if that is not possible, communicate with the research team regarding an updated timeline.
- 4) Accurately document tasks worked on or completed in a timely manner
- 5) Perform other tasks as needed to help move the project forward with the bounds of individual time, expertise and interest.
- 6) Spend at least 1 hour per week on average working on the project.
- 7) Attend the 1 hour working meeting on Mondays at 6p via Zoom whenever possible.
- 8) Provide feedback to the investigators about the processes, procedures, and observations made while working on the project. This includes sharing insights or other thoughts regarding the data and the research outcomes.

Lead Investigator

- 1) Guide the direction and execution of the project including determining and assigning tasks, developing timelines, and monitoring team member progress.
- 2) Resolve conflicts, troubleshoot issues, and arbitrate disagreements.
- 3) Communicate larger goals, events, and project milestones.
- 4) Contribute to the technical and intellectual components of the project.
- 5) Provide information and advice in area of expertise.
- 6) Supervise the development of the research process, templates, forms, and other tools.
- 7) Supervise the contributions to the writing, revising and distribution of the research work, processes, and data.

Co-investigators

- 1) Support the lead investigator with their responsibilities and tasks.
- 2) Serve to fulfill the responsibilities of the lead investigator if the lead investigator is unavailable or otherwise unable to fulfill those duties.
- 3) Contribute to the technical and intellectual components of the project.
- 4) Provide information and advice in area of expertise.

Lead Librarian

- 1) Design and execute the search strategy for the project.
- 2) Support all team members with information literacy skills.

Lead Data Scientist

- 1) Design and execute the data synthesis and meta-analyses for the project.
- 2) Support all team members with data literacy skills.

Screening

- 1) Using templates provided, based on the inclusion/exclusion criteria determine if:
 - a. Titles/abstracts should be promoted to full-text screening.
 - b. Full-text articles should be promoted to critical appraisal/risk of bias screening.
 - c. Articles have an acceptable level of bias to be promoted to data extraction.

Data Collection

- 1) Using templates provided, retrieve data from full-text articles, supplemental materials and online materials.
- 2) As needed, verify or re-collect data from selected articles to improve the data collection process or to update data to be more specific or to standardize collected data.

Author

- 1) Contribute in a substantive way to the research process – generally this means that the work would not be completed or would have been significantly delayed without your active participation.
- 2) Contribute to the writing, revising and distribution of the research work, process, and data.
- 3) Read and make editing suggestions for abstracts, posters, manuscripts and other materials intended for distribution or presentation outside of the research team.
- 4) Meet the minimum authorship requirements as listed under the [ICMJE guidelines](#).
- 5) When requested, provide a summary of the tasks completed during the project.

Authorship

Everyone who meets the minimum authorship requirements as described in the Responsibilities section for the role of Author will be invited to be an author.

Any team member can decline authorship if they desire.

Authorship order will be determined based on contribution level and time on the project. The first author is the person who has contributed the most to the project and is the primary draft writer of the manuscript. The second author is the person who contributed the second most to the project and so on. The levels of contribution will be discussed among the investigators and will be open to input from any author.

Investigator authorship order (senior author) will be determined through discussion among the investigators. The level of effort by the investigator and their trainees will be a primary determinant of investigator author order. The lead investigator is the senior (last) author by default.

Clarification on presentations and submitted abstracts – Author order does not change based on the presentation venue. If you are presenting the work, your name is underlined or otherwise marked as the presenter. Being the presenting author does not equate to being first author.

Violations of this agreement

Violations of this agreement including lack of communication (ghosting) can result in removal from the project, loss of authorship, and trainee disciplinary actions, if needed.

Changes to this document

Changes to this document may be made with the consent of all listed members with assigned roles.

This document may need to change when:

- New individuals join the project
- Current project members leave the project
- Roles and responsibilities need to be clarified, redefined or changed to meet the needs of the project

The timeline and milestones may be updated without the consent of all listed members.

Projected Timeline and Milestones

Critical Appraisal to Publication Timeline

Dates	Item	Primary Responsible people	Oversight/supervision people
Now to 03-27-2023	Critical Appraisal	Students – Reviewer 1 Faculty – Reviewer 2	Faculty
Due 03-27-23	Updated Data Extraction Tool	Amy, Megan (First Author Student, Sherli)	Amy, Megan
03-27-23 to 05-01-23 (no meeting on 5-01)	Data Extraction	Students, Faculty Sherli – Verify data	Faculty
Due 05-01-23	Manuscript Outline	Amy, Megan	Faculty
05-01-23 to 5-22-23	Manuscript first draft	Students – Assigned parts of introduction Faculty – Results, Discussion Amy, Megan, Sherli, First Author Student - Methods	Faculty – to assign intro topics

Dates	Item	Primary Responsible people	Oversight/supervision people
Due 05-10-23	Figures, summary of findings table, Prisma Flow chart, Grade	Figures – Sherli Summary of Findings – Amy & Megan Prisma flow chart – Megan	Amy, Megan
05-22-23 to 06-12-23	Manuscript editing	Students – Assigned parts Faculty – Entire manuscript	Amy, Megan
06-12-23 to 06-19-23	Final formatting	Amy, Megan	Amy, Megan
06-19-23	Submit!	Amy	Megan

Milestones

Item	Number of articles to screen	Time	Division of labor to complete
Title Abstract Screening COMPLETE!	3200 (ish)	8 weeks	Each trainee to screen 640 titles/abstracts as reviewer 1 <ul style="list-style-type: none"> • 80 Titles/abstracts per week Each faculty to screen 640 titles/abstracts as reviewer 2 <ul style="list-style-type: none"> • 80 Titles/abstracts per week
Full-text screening COMPLETE!	582	8 weeks	Each trainee to screen 120 papers as reviewer 1 <ul style="list-style-type: none"> • 15 papers per week Each faculty to screen 120 papers as reviewer 2 <ul style="list-style-type: none"> • 15 papers per week
Critical Appraisal	263	4 weeks	Each trainee to screen 50 papers as reviewer 1 <ul style="list-style-type: none"> • 12 – 13 papers per week Each faculty to screen 50 papers as reviewer 2 <ul style="list-style-type: none"> • 12 – 13 papers per week

Item	Number of articles to screen	Time	Division of labor to complete
Data Extraction and Collection	TBD	4 weeks	<p>Each team member (faculty & trainee) except Amy to extract data from TBD papers</p> <ul style="list-style-type: none"> • TBD papers per week <p>Sherli to verify data collected for all papers</p>