

NIH TECH ACCELERATOR CHALLENGE TEMPLATE

Submission Requirements:

Submissions to the NIH Technology Accelerator Challenge: Non-invasive Diagnostics for Global Health must follow the submission requirements and template format available below. A challenge submission should address: (1) a design with initial feasibility data for a diagnostic platform assessing two diseases in the vasculature, one of which should be sickle cell disease, malaria, or anemia and (2) a robust description of the path for translation of the technology to global health use cases, and how the technology will need to develop further to reduce cost and be suitable for field use.

Challenge participants can submit as an individual or as a team to the [Challenge Applicant Portal](#). Those submitting as a team should identify a Team Leader who will serve as the point of contact and submit the entry on behalf of the team. Only complete submissions meeting the following submission requirements will be reviewed.

- Be written in English, observe all page limits, have appropriate page dimensions (8.5 x 11 inches), use a font size of 11 point or greater, and have at least 1-inch margins.
- Include the requested sections and information listed in the Submission Template below, i.e., Cover Page, Description of Innovation, Qualifications Statements and References.
- Be submitted as a single PDF file to the [Challenge Applicant Portal](#) by the submission deadline.

Where applicable, images, videos, webpages and/or YouTube links will be accepted and can be directly entered into the [Challenge Applicant Portal](#).

At NIH's discretion, submissions that do not follow the submission requirements may not be considered. Any material that exceeds the stated page limits will be considered supplemental and will be reviewed and judged at NIH's discretion. Submissions must not include HHS's logo or official seal or the logo of NIH or NIBIB and must not claim federal government endorsement.

Template

SECTION 1

COVER PAGE (up to 1 page; this does not count toward the 12-page limit for SECTION 2)

Please include the following information on the cover page:

- The Team and the Team Lead's name and contact information

Please also include the following statement:

“I understand and agree that each innovator for the Challenge must comply with all terms and conditions of the Challenge rules, and participation in this Challenge constitutes each such innovator's full and unconditional agreement to abide by these rules.”

SECTION 2

DESCRIPTION OF INNOVATION (12-page limit)

Please include the following headings and content in the description of the proposed technology:

- **Project Summary**
 - Include a project summary (abstract) of 300 or fewer words that clearly states the advantages and novelties of the proposed technology.
- **Background/Significance**
 - Describe the background and significance of the proposed design. Describe any existing methods or technologies that would be used, combined or built based on the proposed design.
 - Describe the tools, technologies and protocols that would need to be developed for the proposed solution.
- **Technology Design and Feasibility**
 - Present a design and initial feasibility data or references for a non-invasive diagnostic platform to address two diseases in the vasculature (at least one of which must be sickle cell, malaria, or anemia). The technology design must describe both the biological principle of the test and measurement approach.
 - Include preliminary data, if applicable.
 - Participants may share data collected on prototypes (if available) and up to five pieces of evidence or feasibility data that de-risk elements of the test and the device.
 - Describe methods and analyses used, including any new methodology used and why it represents an improvement over existing methodology.
 - Describe a strategy to establish feasibility and address any high-risk aspects of the proposed design.

- Discuss the way(s) in which the results can be collected, analyzed and interpreted.
 - List potential difficulties and limitations and how these could be overcome or mitigated.
 - If applicable, address protections of human subjects and compliance with policies related to use of human stem cells, biosafety issues and use of technologies covered by patents or other intellectual property protection.
- **Technology Translation and Use Case Description**
 - Innovators should present a description of the path for translation of the technology to global health use cases and how the technology will need to develop further to reduce cost and be suitable for field use.
 - Describe what changes and further development for hardware, software, or data generation would be required to meet a global health use case.
 - Discuss potential areas for cost reduction and technologies or approaches to achieve the target use case at minimal cost.
 - Include a statement that discusses the advantages and potential pitfalls of the proposed approach.

Please review the Judging Criteria for the Challenge in the [Challenge Guidelines](#) and address the criteria in your submission.

SECTION 3

QUALIFICATIONS STATEMENTS 6-page limit ; this does not count toward the 12-page limit for SECTION 2)

Please provide sufficient evidence of technical competence and qualifications of the entire team. Describe skills and experiences that are relevant to the challenge. The qualification statements will not count toward the 12-page limit for SECTION 2.

If an Innovator team consists of multiple experts residing in different locations, include a brief plan that describes how the team will be structured and how the exchange of knowledge, ideas and implementation of solutions will be facilitated.

SECTION 4

REFERENCES (1 page; this section does not count toward the 12-page limit for SECTION 2)

Cite references to peer-reviewed articles that support the solution proposed in SECTION 2. Include only the most relevant citations.

Please use APA style (<https://apastyle.apa.org/learn/tutorials/basics-tutorial>) for citations and references.