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https://www.grantrequest.com/SID_6044?SA=SNA&FID=35119

***Applicants should only use the above link to start a new application. To continue an application that is in progress or view your past applications please use [this link](#).*

Global Surgical Training Challenge Discovery Awards

Welcome,

You have reached the Intuitive Foundation's grant application portal to create and submit an application for the Global Surgical Training Challenge Discovery Awards. The purpose of these awards is to support teams to develop and test their prototype surgical training modules. If selected as Discovery Award winners, entrants will be expected to utilise their award to develop an initial prototype and self-assessment framework and the associated handover documentation to ensure reproducibility. The chosen teams will receive a Discovery Award of up to \$200,000 USD (the amount awarded will be dependent on complexity of solutions and a budget submitted by the team as part of the application, approved by the Judging Panel) to develop their prototype modules.

Completed applications must be submitted by 12pm Pacific Standard Time (San Francisco, USA) 11th November 2020 in order to be considered.

Before you complete the following application, please ensure you have read and can comply with the Challenge's [eligibility criteria](#) and [terms and conditions](#).

Helpful Tips

- Limit your use of bullets and other formatting.
- Log into your account at https://www.GrantRequest.com/SID_6044?SA=AM to access saved and submitted requests.
- Add mail@grantapplication.com to your safe senders list to ensure you receive all system communications.
- For any questions regarding the application process please contact globalsurgicaltraining@challenges.org.

Preliminary Information

Institution

Team Name:

Team Countries:

Team Lead (must belong to an organization in a lower-income or middle-income country)

First Name, Middle Name, Last Name

Key Team Roles

Competing teams must have team members that fulfill at least three key roles – educator, clinician and technical expert. Where applicable, two roles can be fulfilled by the same person but multidisciplinary collaborations and clear sharing of responsibilities is strongly preferred.

Educator

Manages the pedagogical objectives of the training module, expert in the field of skill acquisition and assessment.

Educator Information

Provide Full Name, Title, Institution, Email, Degree, and expertise

Clinician

Surgical practitioner with clinical experience in lower and middle income countries, who will contextualise the design of the simulation training module with first-hand experience.

Clinician Information

Provide Full Name, Title, Institution, Email, Degree, and expertise

Technical Expert

Manages the development of the technology and materials needed for the delivery of the simulation module.

Technical Expert Information

Provide Full Name, Title, Institution, Email, Degree, and expertise

Additional Team Members

Please list any additional team members.

Innovation and Impact

Innovation and Impact

We are looking for innovative simulation training modules which will enable surgical practitioners and trainees to learn and assess the progress of gaining surgical psychomotor skills without requiring the presence of a teacher. Applicants are required to explain the need for the surgical skill they wish to train and detail the self-assessment framework they plan to develop. Applicants will outline the procedure (or its key steps) that will be turned into a simulation-based training module and how it will deliver on the objectives of the self-assessment framework.

1.1 Problem

State the clinical training problem you are trying to solve, posed in the format: "Allow *[target practitioner(s)]* to become confident and competent in performing *[identified psychomotor skill(s)]* as part of *[surgical procedure(s)]* performed in *[target environment]*".

Explain why you chose this problem and what the impact would be in your region and globally if you succeed in solving this problem. **(500 word limit)**

1.2 Simulation

Explain how the *[identified psychomotor skill(s)]* will be acquired by the user using the proposed simulation technology/ies.

Please address both why you chose the particular technology/ies and how you are addressing the shortcomings of that type of simulation in teaching the performance of a physical skill. Please also address how the user's learnings will directly translate into clinical performance of that skill. **(500 word limit)**

1.3 Procedure

For the aspects of the *[surgical procedure(s)]* surrounding the skills that you are teaching that do not need to be taught through physical simulation (*for example, things like anatomical knowledge, clinical decision making, pre and post operative management*), explain how you would address providing this content to the user and how the physical simulators would be integrated into the complete *[surgical procedure(s)]* module. **(500 word limit)**

1.4 Self-Assessment

Self- assessment of the quality of the skill acquisition must include some mechanism for targeted feedback which enables the user to : ensure they are practicing the appropriate skills; modify their performance to improve competence; and determine when they have practiced to a sufficient level of mastery to perform the procedure in

a patient. Describe the methods you propose to use for self-assessment in this framework. **(500 word limit)**

1.5 Clinical Validity

Describe the methods you will use to test that the simulator(s) and assessment tool(s) you develop will translate into clinically valid skills. **(500 word limit)**

1.6 Innovation

Explain how these modules will be innovative. i.e. better than or more effective than traditional approaches available in that *[target environment]* to your *[target practitioner(s)]* **(500 word limit)**

Adoption

Adoption in resource-constrained settings

We are looking for entries which have the potential to reach and support as many practitioners and trainees in LMICs as possible. Judges will be looking to understand how cost-effective and reproducible the surgical modules are in their chosen setting to increase likelihood of uptake post-Challenge. Applicants will be required to demonstrate their understanding of their users' needs and how they will ensure their modules are reproducible locally.

Users: Adoption in resource-constrained settings

2.1 What can you tell us about your potential users? What are the needs? **(250 word limit)**

2.2 What do you consider crucial to help you drive adoption in resource-constrained settings? **(250 word limit)**

Reproducibility: Adoption in resource-constrained settings

All modules designed as part of the Discovery Awards will need to be fully reproducible in their intended place of use. As such, all teams must provide fully comprehensive handover documentation along with the prototype to allow successful replication of the training module and self-assessment framework.

2.3 How will you ensure that your module is reproducible in its intended place of use? What kind of design choices and handover documentation do you envision to ensure replicability? **(500 word limit)**

2.4 Considering your proposed technology, please detail risks associated with the reproducibility of your training module. **(250 word limit)**

2.5 Please provide the anticipated costs, materials, tools and expertise required by the end user to build, install, operate and maintain the module within the intended place of use. **(500 word limit)**

2.6 Please tell us how this module will offer value for money in comparison to existing Approaches? **(250 word limit)**

2.7 Please describe how your target users will obtain the materials required to build your module and how you will ensure the materials are readily available and/or can be made locally with locally produced or imported materials. **(500 word limit)**

Team's Capability

Team's Capability

We're looking for capable teams with the skills, commitment and capacity to deliver on their submitted application. Judges will be looking for collaborations between the educational, clinical and technological leads and their teams with comprehensively defined roles and objectives. The application and associated budget will have to be clearly articulated, ambitious yet achievable within the timeframes given.

Your Team: Team's Capability

3.1 Please tell us about your team - their skills, capabilities and how much time each team member will commit to the project. **(500 word limit)**

3.2 As above, please highlight who will be leading on the educational, clinical, technological deliverables of the project and why they are suitable for the role. **(250 word limit)**

3.3 Have you identified any particular skill set your team will have to acquire during the development process? **(250 word limit)**

3.4 Should you be selected for a Discovery Award, the team lead accepting the award must be from an organisation in a lower-income or middle-income country. Please elaborate on how this organization intends to contract with other organizations on this project (if applicable). **(250 word limit)**

Development Plan & Budget: Team's Capability

3.5 Please lay out below the development plan for your surgical training module and provide detail of all the major milestones you are anticipating during the active grant period between January 2021 to October 2021. **(500 word limit)**

The development plan should include details on development of your module, clinical testing of that module, the development of a design/replication packet and the development of a protocol for a 3rd party to execute in phase 2 to independently show it works.

In August 2021, all Discovery Award winners will be expected to attend a virtual event in which all team members will be expected to demonstrate their work in progress. This event is intended to provide feedback to awardees for pulling together proposals for the next phase.

Upload your Development Plan

Budget**Instructions:**

- Please enter budget information using US dollars.
- Applicants may apply for grant funding up to \$200,000 per project (US dollars, total costs).

Total Budget (USD):

3.7 Budget Breakdown & Justification

Please provide a detailed overview of the budget. Include how the funds relate to the proposed milestones in the development plan.

Upload a copy of your Budget

Supplemental Information**Supplemental Information****Instructions:**

- If your project proposal contains images, tables, graphs, etc., we strongly encourage you to upload your full proposal here in order for the images to make sense in the context of the proposal.
- Additionally, you have the option to upload any supporting documents, images, and videos you feel are necessary to your proposal.
- Please upload all documents in PDF format.
- Maximum size for ALL uploaded documents combined is 1,000 MB (1 Gig)

1. Project Proposal
2. Supporting Documents, Images, Videos