

# Medical Education Grand Innovation Challenge 2022/2023

## Competition Guidelines

### 1. Overview

The NUS **Medical Education Grand Innovation Challenge (MEGIC)** is a program launched in September 2019 to drive innovation in medical education. This is in line with NUS Yong Loo Lin School of Medicine's efforts to enhance student learning through advances in pedagogy and technology.

MEGIC is a year-long event during which teams identify unmet needs and opportunities for enhancement in medical education, then work on projects to propose and develop solutions accordingly.

The final evaluation and judging of the teams' projects will evaluate and score the projects for business strategy, innovation, design viability and impact of solutions.

#### **Rationale**

MEGIC is intended to serve as a platform to solve the most pressing challenges in medical education and to raise the bar in terms of teaching effectiveness. It aims to encourage educators, students and admin staff to identify gaps and opportunities to enhance learning effectiveness, and to subsequently develop creative solutions to address these unmet needs.

#### ***Building a culture of innovation and entrepreneurship***

Through MEGIC, we hope to develop a strong sense of curiosity and nurture the following attributes:

1. **Curiosity** – to question and not accept current limitations
2. **Creativity** – to look beyond and find new solutions
3. **Compassion** – to care about issues affecting human health and well-being
4. **Collegiality** – to be able to work in teams to achieve more
5. **Collaboration** – to find value in working together with people from different disciplines and backgrounds
6. **Commercial Intelligence** – to be entrepreneurial and understand what works in the marketplace

### 2. Competition Guidelines

#### **2.1 Formation of Teams**

MEGIC welcomes individuals of any background, including academic staff, students, admin staff, and healthcare professionals.

Participants are encouraged to form teams that include members from different institutions and/or disciplines, to enable the convergence of different expertise, the development of productive partnerships and the promotion of interprofessional collaborative practice and interprofessional education.

A team must meet the following criteria:

1. Each team must comprise at least three members. There is no maximum number.
2. All team members are expected to contribute actively to the project. Medical students are *highly* encouraged to be part of the team.
3. No change in team membership is permitted after the proposal has been submitted.

Each participant may join a maximum of two teams. The eligibility of participating teams with team members in common will be subject to further review by the MEGIC Advisory Committee, to avoid their team compositions being too similar.

## 2.2 Competition Timeline – Key Dates and Submissions

Deadline to submit project proposal, including request for seed funding (if desired)	24 February 2023
Announcement of seed grant funding to be awarded to a maximum of ten teams	31 March 2023
Deadline to submit final report	14 July 2023
Announcement of projects shortlisted for presentation and final judging on Educators' Day	21 August 2023
NUS Medicine Educators' Day, including the final judging and prize presentation for MEGIC	6 October 2023

## 2.3 Academic Integrity

All teams should submit a declaration of prior work done, which should be included in their proposal. Such prior work includes, but is not limited to, publications, previous patent applications, participation in other competitions, etc. Approval for the use of prior work in the competition is subject to case-by-case review by the MEGIC Advisory Committee.

Neither Master's degree theses nor doctoral dissertations are accepted as submissions for any stage of the competition.

All sources of academic references used and assistance received over the course of the competition should be acknowledged.

## 2.4 Details of Events and Required Submissions (in chronological order)

### 2.4.1 Submission of Proposal

Each team is required to submit a proposal that describes the unmet need or opportunity they are seeking to address as well as their proposed solution. The proposal template may be downloaded from the MEGIC website.

The submission deadline is **24 February 2023**.

The proposals will be reviewed by the MEGIC Advisory Committee. Their decision to accept or reject proposal submissions is final.

In brief, the criteria used for proposal review include:

1. Relevance and scale of the problem or unmet need identified
  - Including number of people/students affected, resource usage, impact
2. The proposed solution addresses one of the following areas:

- Teaching and learning
  - Technology-enhanced learning
  - Assessment and evaluation
  - Supervision, mentorship, pastoral care
  - Peer support and faculty development
3. Comparison of the proposed solution with existing solutions
  4. Viability
    - Including technical feasibility, feasibility of implementation and sustainability
  5. Peer acceptance and transferability
    - Including the potential to apply the proposed solution to benefit a wider community

#### **2.4.2 Seed Grant Funding**

To help kick-start their innovation process, teams may submit a budget request for seed grant funding together with their proposal. Each seed grant has a maximum value of \$1,000. If approved, the budget would be reimbursable upon submission of the final report.

Eligibility Criteria:

1. Primary affiliation of one of the team members must be with the NUS Yong Loo Lin School of Medicine (NUSMed). The disbursement of the seed grant can only be paid through those who are affiliated with NUSMed, in accordance with NUS Finance guidelines.
2. Proposals which have not received any forms of grant by a different agency previously.
3. Proposals have been accepted by the MEGIC Advisory Committee.

Seed grant funding will be awarded based on the budget submitted as well as the potential of the project as assessed by the MEGIC Advisory Committee.

The decision to award seed grant funding does not impact subsequent judging decisions.

#### **2.4.3 Submission of Poster**

All accepted teams would need to submit an e-poster, which would showcase their project to audience members, potential partners and distinguished guests. Specifications for the poster presentations will be provided closer to the date.

#### **2.4.4 Submission of the Final Report**

The final report has two components, a video summary and the written report:

##### **A. Video Summary**

This video component of the final report should give a brief introduction to the problem and explain how the proposed solution would be effective. The duration of the video should not be more than three minutes. It is to be submitted for upload onto the MEGIC

website in Windows Media Player format (details will be provided closer to the submission date).

## **B. Written Report**

The written component of the final report should be in Word format and not exceed 2,000 words (excluding citations and acknowledgments), including but not limited to the following sections:

- a. Brief description of the project, including its significance, intended impact and proposed implementation plan
- b. Benefit-cost analysis of the project as well as competitor analysis
- c. Proposed plan for scalability and acceptance by a wider population of learners/teachers, giving due consideration to:
  - i. Target audience
  - ii. Feasibility of implementation
  - iii. Creativity
  - iv. Potential for further work
- d. Briefly address the relevance of healthcare regulation and intellectual property laws to the development of your project (if relevant). You should discuss potential ethical difficulties (if applicable) and how they would be addressed.

The deadline for submission of the final report is **14 July 2023**.

### **2.4.5 Shortlist for MEGIC Finale on Educators' Day**

The panel of judges will review and evaluate the final reports to shortlist the top projects. These shortlisted teams will be invited to present an oral pitch and compete for the Grand Prizes on Educators' Day.

The format and plans for Educators' Day will be shared in due course.

## **2.5 Final Competition on Educators' Day**

### **2.5.1 Oral Presentation**

The top shortlisted teams will be invited to present a five-minute oral pitch to the judges, followed by a two-minute Q&A. Their presentation should cover key project details, including its impact on healthcare, viability of the proposed solution as well as plans for marketing and commercialisation. Teams are welcomed to use live demonstration, short skit or any other creative means of delivery. The mode of presentation delivery and effectiveness of the pitch will also be assessed.

### **2.5.2 Rehearsal of Presentation**

The shortlisted teams will be notified on the details of the rehearsal, prior to the finals.

## **3. Judging Panel**

The MEGIC will be judged by an esteemed panel of judges, comprising of experts in the field of medical education and technology.

#### 4. Awards

Teams will be assessed based on their final report comprising of a short video and a written pitch. The top shortlisted teams will invite to present their work to the panel of judges on Educators' Day on 15 September 2023, at which the top three winning teams will be announced. All participants will receive a certificate in recognition of their participation.

The list of prizes and awards is as follows:

<b>Prize/Award</b>	<b>Prize Money</b>
Grand Prize	\$10,000
2 <sup>nd</sup> Prize	\$5,000
3 <sup>rd</sup> Prize	\$3,000
Best Video	\$1,500
Special Mention (awarded at the judges' discretion)	\$1,500

#### 5. Post-competition

All teams are encouraged to continue the development of their respective projects. The School may reach out to the winning teams with potential to advance their project collaboratively.

*Updated as of 7 June 2023*