

Nelson Mandela African Institute of Science and Technology

Hosts 2nd

African Grand Challenge

25th – 29th January 2017



“The Impact of Digital Technologies on Healthcare Services”

Sponsored by

Merck Sharp and Dohme (MSD)

Objectives

The objectives of the NM-AIST African Grand Challenge are to innovate for Africa, to collaborate and learn together, and to foster multi-level partnerships for sustainable futures. We seek to bring together students who are interested in the application of science and technology research to critical problems in Africa. We hope that this event can be one of many such events that stimulate creative problem solving in a way that leads to increase in product and service innovations; innovations that foster new companies, new jobs, and ultimately enhance the quality of life in Africa. The African Grand Challenge is designed to promote a collaborative learning experience in which participating students, universities, local and International companies collaborate and learn from each other. One important and lasting impact of the AGC will be a network of public and private partnerships that provides a foundation for a community of researchers and entrepreneurs that work towards sustainable solutions to pressing social problems.

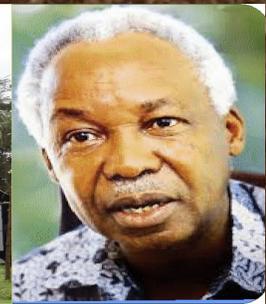
Venue and Participants

The second annual African Grand Challenge is scheduled to be held at NM-AIST, Tanzania from January 26-29, 2017. Student teams from the following universities will participate in this historic event:

- Nelson Mandela African Institute for Science and Technology, Tanzania
- Cape Peninsula University of Technology (CPUT), South Africa
- Uganda Technology and Management University (UTAMU), Uganda
- International Institute for Water and Environment (2iE), Ouagadougou, Burkina Faso
- African University of Science and Technology (AUST), Abuja, Nigeria
- Carnegie Mellon University (CMU-R) -Rwanda and
- Strathmore University of Kenya

A team of four students will be selected by the participating universities to include the skills required to address the Grand Challenge theme described below. All students should plan to arrive at the NM-AIST campus in Arusha, Tanzania not later than Wednesday, January 25 at 16:00. Students required to travel long distances will be eligible for travel grants. Housing and all expenses during the Grand Challenge will be provided by NM-AIST. Visiting student teams may plan to depart on Sunday, January 29, 2017. All participating students will receive a participation award of USD \$250 in addition to competing for team awards given to 1st, 2nd and 3rd place teams on the final day of the event.





Sessions of 2017 AGC

The African Grand Challenge is comprised of three separate but related sessions. The first session will begin Thursday morning, January 26, 2017, with an orientation for all participating student teams followed by a tour of the NM-AIST campus and lunch. In the afternoon, the students will attend an **investor Forum**. In this forum, four leadership teams that have product or service proposals with mature business plans and functioning prototypes will present their plans to a distinguished panel of investors. Each presentation will be 20 minutes, followed by 10 minutes of questions from the panel of investors. While there is no requirement to commit investment funds at this time, it is hoped that this workshop will increase the likelihood that these teams will be able to raise the funds necessary to take their product or service to market. At the end of the presentation, the panel of investors will conduct a reflective lessons learned session providing feedback to all of the presenters. In additions, the panel of judges will take questions from the students that will be attending this session. This session will also be open to the public.

The second session begins Friday morning, January 27 and will run from 0800 to 1500. This session is designed to foster innovation and collaboration so that the participants can explore one aspect of the AGC general theme together. Participating students will be placed into teams of four and asked to explore how emerging technologies such as digital sensors, big data and analytics, robotics or mobile/smart cell phones could be integrated into solutions that would significantly increase the capability to provide low cost, reliable and effective transportation services in support of healthcare in Africa. Participating students will receive a case study at the end of the Thursday workshop that presents a healthcare logistics problem. This problem will serve as the basis for the innovation and collaboration session. The goal of this session is to have students work together to explore creative ways to address this critical problem. Consistent with the concept of open innovation and design thinking, this collaboration will not only surface useful ideas that could be applied to the Grand Challenge but also will help build the professional network that will service to foster innovation in the future..

The third session will begin at the end of the collaboration session. At approximately 1600, students will be placed back into their university teams and will be given the actual Grand Challenge. This Grand Challenge will be a specific problem that relates to the general theme of “exploring how digital technology can enable new products or services that significantly improve healthcare services in Africa. Student teams will have Friday evening, January 27 and Saturday morning, January 28, to develop a recommendation for a technology-enabled solution that addresses the specific challenge. The student teams will have until Saturday at 1200 to develop a slide presentation that summarizes their recommendations. Beginning at 1300 each team will make a 15 minute presentation followed by 10 minutes of questions from a panel of distinguished judges. More details on the competitive challenge (including pre-readings) will be mailed to the participating teams around January 5th, 2017.

Recognition and Rewards for Participants

The panel of judges will award prizes as follows:

First Prize: US\$ 3,000

Second Prize: US\$ 2,000

Third Prize: US\$ 1,000

In addition to the awards given for the winning presentations, all student team members will receive a participation award of USD \$250.

Following the presentations at approximately 1700 a final session will be held to recognize all participants and to announce the winners. A reception will be held following the awards session. This afternoon presentation session and the awards session will be open to the public.

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