

June 7, 2016

Dear Genes in Space™ contest applicants:

We want to sincerely thank you again for entering the Genes in Space™ UAE competition and provide you an update to the upcoming planned activities.

Implementing cutting edge science in space is both inspiring and challenging and the contest organizers are planning two events to allow for further refinement of your existing proposal. A special webinar targeted at teachers will be offered that will provide the opportunity for you to learn more about the scientific method of DNA experimentation using Polymerase Chain Reaction (PCR). The webinar will be conducted between June 27 – July 1, 2016 and specific details will follow. An overview of the planned webinar is provided in the enclosure. Students are encouraged to participate in this short webinar if their time permits. The second planned activity will be an opportunity for teachers to participate in a one day hands-on workshop to be conducted in Abu Dhabi on August 22, 2016. The workshop will review the principals of DNA PCR and provide an opportunity to perform a DNA experiment using the miniPCR™ thermal cycler and perform gel electrophoresis to analyze the results. This event may accommodate some limited student participation along with the teachers depending on the available facilities and equipment. Participant selection will be forthcoming. The knowledge gained from these events will be shared with others in their respective classrooms.

After the webinar and workshop, all teams will be given the opportunity to update their contest entry if desired to incorporate knowledge gained from these events. We want to make the contest as inclusive as possible after providing these training opportunities so applications for all high school students in the UAE will reopen at the end of August. Further details about the timeline, webinar, and workshop will be communicated via the Genes in Space™ UAE website: www.genesinspace.org/contest-uae.

Thanks again for entering the Genes in Space™ contest and we will be in touch soon.

Thank you,



Mohammed Al Otaiba
Editor-in-Chief
The National

Genes in Space Webinar - UAE

OVERVIEW

A new era of DNA exploration in space is opening before us. This webinar is aimed at students and educators in grades 7 through 12 interested in exploring this new scientific frontier. The speakers, Ezequiel (Zeke) Alvarez-Saavedra and Sebastian Kraves, co-founders of miniPCR, will introduce the audience to Genes in Space, a science competition where students and teachers can design DNA analysis experiments to address real-world challenges in space exploration. Winning experiments are sent to the International Space Station and become part of actual research programs in the hands of astronauts. We will lay out the scientific context for the contest, explain the proposal selection process, and outline the rewards, including mentoring by world-class scientists. We will also engage the audience in discussion of relevant proposal topics. Attendees will emerge with a better understanding of open scientific challenges involving DNA analysis in Space, and leave ready to craft competitive proposals. Become a part of a global community of innovators!

- DNA and Space
- DNA Technology Transformation
- Polymerase Chain reaction (PCR) background
- Real-world impact examples
- Beyond Earth
- ISS National Laboratory
- Biology Meets Space
- Real-world space proposal topic examples
- Genes in Space Contest
- Timeline
- Questions