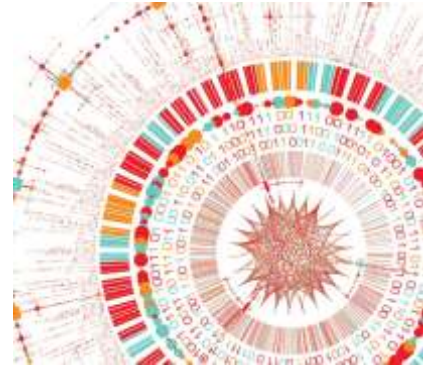


DNA Day 2023 – Art GENome

Art work competition for biomedical students



Rules

What is the DNA DAY Art Genome competition?

It has been more than 60 years since James Watson and Francis Crick described the double helix structure of the DNA. April 25th is the International DNA Day, which was established by the European and American Societies of Human Genetics and is celebrated all over the world with various events¹.

This year, for the second time in Georgia, an art contest will be held with the participation of students in the biomedical field. The purpose of the competition is to promote the knowledge of genetics in Georgia, interest in science and development of creative thinking. The contest is dedicated to the challenges associated with the diagnosis and management of rare diseases and the use of artificial intelligence to overcome these challenges.

The organizers of the contest are the Department of Molecular and Medical Genetics, Tbilisi State Medical University and the Georgian Society of Medical Genetics and Epigenetics.

Before you start, please read the rules carefully!

Terms and Conditions:

Biomedical students of Georgian and international programs can participate in the contest.

Only one submission per entrant is allowed

Participants will have the opportunity to present their works (paintings and digital graphics).

- The artwork must be relevant to the specified topic.
- The size of the physical artwork should not exceed A3 (297 x 420 mm).
- Both digital and traditional artwork is accepted.
- Digital artwork should be submitted in a high resolution (at least 300 dpi) in JPEG, TIFF or PNG format.
- Traditional artwork should be sent by e-mail: dnaday.art@gmail.com in the form of a high-resolution photograph (at least 300 dpi) and must be presented physically at the Department of Molecular and Medical Genetics, TSMU (address: 29 Vazha-Pshavela Ave., 2nd building, 4th floor).
- Each submission should be accompanied by the following information in PDF format: The submitter's name, name of institution, faculty, contact phone number and e-mail address, the title of the artwork, and a short description of how the image relates to the topic and the inspiration behind it (max. 150 words).
- The competition closes at **17:00, 18th of April 2024**

- The artwork should be sent by e-mail: dnaday.art@gmail.com (traditional works should be presented by email and physically at the Department of Molecular and Medical Genetics of TSMU).
- The files should be named in the following format: surname_name_dnaday_art_2024 (Surname and first name should be in English) Sample: Kiknadze_Ana_dnaday_art_2024;
- In the "Subject" field of the e-mail, indicate the following: surname_name_dnaday_art_2024 (Surname and first name should be in English) Sample: Kiknadze_Ana_dnaday_art_2024;
- Attach a JPEG, TIFF or PNG file and send.
- Late submissions will not be considered.

The organizing committee has the right to not consider any work that does not comply with the theme, the rules and conditions indicated above, as well as general ethical principles.

By entering the competition all entrants grant to organizers the right to publish and exhibit their artworks in any of our publicity and on the website.

All entries must be the original work of the entrant.

The competition is open to Georgian and international entrants.

All entries will be judged by a panel of judges. The judges will select a short list of artworks for publication on the website.

The Topic of the Contest 2023:

Individuals with rare diseases face numerous challenges, including late and incorrect diagnosis, inappropriate or ineffective treatment, lack of accurate monitoring systems, and more. These challenges affect more than

350 million people worldwide with rare diseases and create a significant economic burden on the health care system, and most importantly, result in poor outcomes for patients.

Therefore, it is necessary to develop systems that will help early diagnosis, improve the effectiveness of treatment and monitor the course of the disease. One such tool is artificial intelligence, the usefulness of which has already been demonstrated in the diagnosis and treatment of common and rare diseases.²

Question:

How the application of artificial intelligence (AI) affects the diagnostic odyssey of genetic and rare diseases and the drug development for rare diseases.

You have full creative freedom when creating the work. You can touch on such topics as: data processing, genome analysis, functional analysis, genomics, epigenomics, metabolomics (other omics), from genotype to phenotype, biobanks, personalized approaches, etc.

For inspiration you can visit the websites:

<https://www.rcpath.org/discover-pathology/competitions/art-of-pathology-competition.html>

<https://www.lji.org/blog/san-diego-students-share-science-through-art/>

<https://www.cardiff.ac.uk/news/view/1479095-medical-students-display-their-creative-talents-at-the-national-museum-in-cardiff>

Prizes:

First Place - 500 GEL

Second Place - 300 GEL

Third Place - 200 GEL

All participants will receive a certificate of participation

References:

¹eshg.org, accessed February 14, 2023; ashg.org, accessed February 14, 2023

²Wojtara M, Rana E, Rahman T, Khanna P, Singh H. Artificial intelligence in rare disease diagnosis and treatment. Clin Transl Sci. 2023 Nov;16(11):2106-2111. doi: 10.1111/cts.13619. Epub 2023 Aug 30. PMID: 37646577; PMCID: PMC10651639.

Special dates

28 February – Submissions open

18 April – Deadline of submissions

25 April – Winners will be announced

On April 25, a workshop "Face2Gene software in the diagnosis of rare diseases" will be held at the Department of Molecular and Medical Genetics of Tbilisi State Medical University for participants of contest.

www.geneticsgeorgi.org

Facebook: @geneticsgeorgia

For additional questions and support, please send an email to: geoepigene@gmail.com

Or call: 599298168 between 9.00 - 17.00 hrs.

Department of Molecular and Medical Genetics of TSMU

Scoring

All entries will be scored by a panel of judges

Scoring will be based on the following criteria:

- Compliance with the topic of the competition (5 pts)
- Technical capabilities (5 pts)
- Originality (5 pts)

Total - 15 pts

Three winners will be selected for I, II and III places. All participants will receive a certificate of participation. The winners will be announced on April 25. The winning entries will be published on the website:

www.geneticsgeorgia.org.

Good Luck!