

DNA-AIHEINEN KIRJOITUSKILPAILU

Kilpailun kaikki ohjeet löytyvät sivulta dnaday.eu.

Fifth Annual European DNA Day Essay Contest for High School Students

Deadline: Thursday, March 1, 2012

Choose from one of the following questions

Question 1: It is reported that it will soon be possible to sequence a person's genome for under 1000 Euros. Would you want to have your genome sequenced? What would be the potential advantages and disadvantages, particularly as related to your health? What would you like to know about your health risks and those of your family and what would you rather not know? How might this information lead you to modify your life style or life choices?

Question 2: Genes exert their influence on organisms by being turned on and off in precise ways and at precise times. Normal development and even behaviour are regulated by these processes, whereas birth defects and disease can result when problems arise during the process of "gene regulation". In the last 30 years, genomic research has uncovered many mechanisms affecting gene expression that earlier scientists could have never imagined. Choose a gene regulation process (some are listed below) and, using references to support your arguments, explain how that process, when it goes wrong, can be involved in the production of disease, such as cancer.

Examples of gene regulation mechanisms: repressors, activators, enhancers, RNA interference, uniparental disomy, imprinting, epigenetic changes to chromatin, environmental modifiers.

Participants

Secondary school students between 14 and 18/19 years of age may enter the contest. All essays must be submitted by the student's classroom teacher. As only three essays per class will be considered, teachers are urged to choose the best essays from a class to submit.

Length

The essay is strictly limited to 750 words. One optional figure or image can be included in the essay. Any figure legend will be included in the word count. A picture of the student should also be attached if possible.

Language

Whenever possible, please submit essays in English. However, students are welcome to write their essays in their own language and have them translated by their teachers/schools. If needed, the ESHG can provide translation. If the original document was written in a language other than English, please provide the original composition as well as the translated one.

Prizes

First Place Winner: EUR 300.- In addition, sponsoring teachers of first place students will receive EUR 1.000.- to organise a science project or to purchase classroom equipment.

Second Place Winner: EUR 200.- In addition, sponsoring teachers of first place students will receive EUR 800.- to organise a science project or to purchase classroom equipment

Third Place Winner: EUR 100.- In addition, sponsoring teachers of first place students will receive EUR 500.- to organise a science project or to purchase classroom equipment

All participants will receive a certificate of appreciation for their participation in the contest.
dnaday.eu

Yst. terveisin

Henna Tyynismaa

Akatemiatutkija, Helsingin yliopisto, Lääketieteellisen genetiikan osasto ja Molekyylineurologian tutkimusohjelma