



Republic of the Philippines  
**Department of Education**  
REGION VII - CENTRAL VISAYAS  
DIVISION OF CITY SCHOOLS - TAGBILARAN CITY

**Office of the Schools Division  
Superintendent**

DIVISION MEMORANDUM

No. 267 s. 2024

April 8, 2024

**INVITATION TO THE IAFSW-MISAC COMPETITION 2024 ON NEGLECTED  
TROPICAL DISEASES AND CLIMATE CHANGE**

**To:** Assistant Schools Division Superintendent  
Chiefs ( CID, SGOD)  
All Others Concerned

1. This Office disseminates the attached OM-OUOPS-2024-03-02235, titled “Invitation to the Joint IAFSW-MISAC Competition 2024 on Neglected Tropical Diseases and Climate Change,” for information and Guidance of all concerned.
2. The Competition aims to raise awareness among teenagers about tropical diseases(NTDs), their impact on global health, and how climate change affects efforts to control , prevent or eliminate NTDs.
3. This is open to all Learners from Grade 7-9. Kindly note that the participants to the competition is voluntary and non-mandatory and subject to the discretion of the Schools Division Superintendent taking into consideration applicable DepEd Orders and Memoranda. The deadline for the submission of entries is on May 1, 2024.
4. For detailed information, please refer to the attached competition flyer.
5. Immediate dissemination of this Memorandum is desired.

**WILFREDA D. BONGALOS PhD, CESO V**  
Schools Division Superintendent

WDB/JAAL/MCC SGOD/elc



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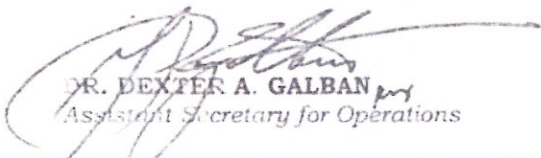
OFFICE OF THE UNDERSECRETARY FOR OPERATIONS

MEMORANDUM  
OM-OUOPS-2024-01-0125

TO : REGIONAL DIRECTORS  
SCHOOLS DIVISION SUPERINTENDENTS  
ALL OTHERS CONCERNED

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100%

FROM :   
ATTY. REVSEE A. ESCOBEDO  
Undersecretary for Operations

  
DR. DEXTER A. GALBAN  
Assistant Secretary for Operations

SUBJECT : INVITATION TO THE JOINT IAFSW-MiSAC COMPETITION 2024  
ON NEGLECTED TROPICAL DISEASES AND CLIMATE CHANGE

DATE : March 20, 2024

This is in reference to the attached official letter dated March 5, 2024 from the SEAMEO (Southeast Asian Ministers of Education Organization) Regional Centre for Sufficiency Economy Philosophy for Sustainability (SEPS) inviting schools to participate in the Joint International Association for the Future STEM Workforce (IAFSW) – Microbiology in Schools Advisory Committee, UK (MiSAC) Competition 2024 on Neglected Tropical Diseases and Climate Change.

The competition aims to raise awareness among teenagers about neglected tropical diseases (NTDs), their impact on global health, and how climate change affects efforts to control, prevent, or eliminate NTDs.

In this light, we would like to respectfully request that you extend this invitation to all learners from Grades 7-9 within your respective jurisdictions. **The deadline for submission of entries is on May 1, 2024.**

Kindly note that participation to the competition is **voluntary** and **non-mandatory**. For more information, you may reach out to the organizers directly through e-mail at [info@iafsw.org](mailto:info@iafsw.org) and [omjar@iafsw.org](mailto:omjar@iafsw.org) or you may visit the official website at <https://ntds.iafsw.org/>. Attached herewith is the competition flyer for your reference.

**Copy Furnished:**  
Francis Cesar B. Bringas, Assistant Secretary for Operations

OASOPS/CEA



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Doc. Ref. Code: OM-OUOPS Rev. 01  
Effective: 03.23.23 Page 1 of 1



SEPS 02/C076-086/24

5 March 2024

**Subject: Invitation to Participate in the MiSAC-IAFSW Competition 2024 on  
Neglected Tropical Diseases and Climate Change**

Dear Dr Margarita Consolacion C Ballesteros,

We would like to extend a warm invitation to the schools within your network to take part in the Joint IAFSW-MiSAC Competition 2024 on Neglected Tropical Diseases and Climate Change.

Organized by the International Association for the Future STEM Workforce (IAFSW), the Microbiology in Schools Advisory Committee, UK (MiSAC), and the SEAMEO Regional Centre for Sufficiency Economy Philosophy for Sustainability (SEAMEO SEPS), this esteemed event aims to heighten awareness among teenagers about the significant impact of NTDs on global health and their correlation with climate change. The submission deadline for entries is May 1st, 2024.

It would be appreciated if you could share this invitation to the secondary/high schools and colleges under your network. For detailed information, please refer to the attached competition flyer or visit an official website at

We are confident that this competition will immerse your students in scientific exploration and contribute to raising awareness of global health challenges. Your school's active participation is crucial in making this event a success. If you have any inquiries or require further assistance, please do not hesitate to reach out to the competition contact at

We sincerely appreciate your support and look forward to the enthusiastic involvement of your students in this intellectually stimulating competition.

Yours sincerely,



Duriya Amataviviat  
Centre Director

Dr Margarita Consolacion C Ballesteros  
Director, International Cooperation Office  
Department of Education  
Philippines

Attachment: Competition flyer

# Neglected Tropical Diseases and Climate Change

Not later than  
May 1, 2024

## Aim of the Joint IAFSW-MISAC Competition

To develop an understanding among teenagers of the impact of neglected tropical diseases (NTDs) on global health, and how climate change may impact their distribution around the world.

### Background

NTDs have not been widely studied, though they affect over 1.7 billion people on our planet. They are usually found in tropical areas, particularly in the southern hemisphere. They largely affect impoverished communities, often in remote areas. Poor water quality, sanitation, hygiene and healthcare in these areas heighten their impact. Twenty conditions have been designated NTDs, and most are caused by a parasitic, bacterial, viral or fungal pathogen. Many are spread by various animals, that act as **vectors**, while others pass directly between infected people.

NTDs cause serious illnesses, damaging patients' attendance at school or work, and may be fatal. Some also cause disfigurement, often resulting in social stigma and isolation. In addition, some NTDs also affect animals, which can harm farming practices. Both wild and domestic animals can act as reservoirs of infection (eg, game animals for sleeping sickness) or directly transmit the infection to humans (eg, dogs spread rabies). The economic impact of NTDs is huge: in affected areas, they trap vulnerable populations in cycles of poverty, costing developing countries billions of pounds each year.

### Impact of the competition

You are required to design an illustrated, web-page report for teenagers to raise their awareness of NTDs.

- Select **one** neglected tropical disease
- Describe the disease in English, including its symptoms, where it is found in the world, preventative measures and treatments, and the impact it has on affected people and communities.
- Describe the pathogen that causes the disease and what is known about how it is transmitted.
- Discuss how climate change may alter the spread, global distribution and impact of the disease.

### Format of entries

- **Students** may produce your entry either by hand or computer.
- **Students** use a single A3 sheet of paper or two A4 sheets taped together (a combination of diagrams/photographs/graphs), scan the paper and save it in PDF format.
- **Teachers** are required to register and then submit the students' PDF files at <https://ntds.iafsw.org> no later than May 1, 2024.
- **Teachers** must provide hard copies of the entries and deliver them to the following address: Wisdom Park Bldg. 3 Soi 23 Chaloem Phrakiat Ratchakan Thi 9 Road, Nongbon, Prawet, Bangkok 10250 Thailand, ensuring it reaches us no later than May 15, 2024.
- The entry may be submitted by an individual or a group of not more than four students.

### Prizes

Students: 1st \$120 2nd \$60 3rd \$30

A certificate will be awarded to each student submitting an entry of scientific merit. The results, winning entries and a report of the competition will be published on the IAFSW website competition pages at

Sand fly: vector that transmits the parasite Leishmania, which causes Leishmaniasis  
Image by R. Squire, 2004. Photo Disc Artwork



Trypanosoma brucei: parasite (yellow) that causes Human African Trypanosomiasis  
Image by Sophie G. La. Le. 2008. A. Trypanosoma (CC BY 4.0)



Freshwater snail: vector that transmits the schistosoma parasite worm  
Image: World Health Organization



Mycobacterium leprae: bacteria (red) that cause leprosy  
Image by World Health Organization



Vampire bat: a vector that transmits rabies virus in Peru  
Image: David Goodenature. Shutterstock. Thousands of images



Triatoma pallidipes (kissing bug): vector of the parasite Trypanosoma cruzi

NTDs are preventable and treatable but affected communities often lack the resources to tackle them well. In general, effective vaccines against NTDs are not yet available. Treatment options are limited, may have significant side effects, or are met with pathogen resistance. In 2020, the World Health Organisation published a roadmap to control, prevent or eliminate the NTDs by 2030 and progress is being made.

However, climate change may make this more difficult. Rising temperatures and changes in rainfall patterns may alter vector habitats, allowing them to expand into new areas. Warmer winters may allow arthropod vectors to survive longer. Extreme weather events also displace people, resulting in overcrowding within temporary shelters. These can increase the spread of NTDs and may bring people and vectors closer together, helping the transmission of NTDs. Extreme weather can also disrupt healthcare, housing, sanitation and food security, and the changing climate increases poverty, malnutrition and poor health, worsening the effects of NTDs.

### Rules to apply

1. Use the scientific name of any pathogens you mention.
2. Don't forget that the first name (genus) begins with an upper-case letter and the second name (species) has a lower-case initial letter (eg *Trypanosoma brucei*). This can be abbreviated, for example, to *T. brucei* after its first use.
3. Use italics for the scientific name - or underline it if your entry is hand-written.
4. Use your own words because plagiarism (which is cheating) will be penalised.
5. For data and other material used to illustrate your entry, provide information of their sources.

### What makes a good web page?

Effective web pages rely on being not only informative but attractive, lively, well-designed and often amusing, in order to make an immediate visual impact. This can be achieved by using photographs, diagrams, drawings, plus data and sources of further information. Make the presentation of your entry entertaining for its intended audience - teenagers.

### Where to contact us