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Editorial: Highlights in emerging tropical diseases 2021/22

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Editorial on the Research Topic

Highlights in emerging tropical diseases 2021/22

The articles in this Research Topic, “*Highlights in Emerging Tropical Diseases 2021/22*”, are a demonstration of the central place that the control of infections in tropical settings has during the current global climate change situation (1). The last report from the Intergovernmental Panel on Climate Change (IPCC) group confirms with high confidence that climate change will increase the number of deaths and the global burden of non-communicable and infectious diseases (2). The increase in temperature (global warming) is one of the variables with the greatest impact on climate change and is responsible for the increase in vector-borne diseases (3). The call for specific action from the specialists that inaugurated the new journal, *Frontiers in Tropical Diseases*, is presented in the first article of the present Research Topic and is a perfect summary of the current status of the challenges presented by emerging infectious diseases in tropical regions (Rodriguez-Morales et al.). Certainly, the increasing urgencies due to climate change are being presented faster than anticipated (2) and will need energetic concerted action (4).

The article by Salcedo et al. is a good example of how ingenious modifications of diagnostic technologies can contribute to reducing costs in poorly resourced countries. The urgency occasioned by the COVID-19 pandemic for public health organizations and health ministries around the world pushed researchers to look for alternatives given the scarcity of diagnostic reagents (5), bringing great impact in low and middle-income countries.

Finally, the article by Nunes et al. describes the epidemiological and ecological determinants for spotted fever in Minas Gerais state in Brazil and contributes crucial information for this largely unexplored cause of febrile diseases. The situation revealed by this study provides lines of action for public health measures, including active surveillance and control for vectors of this disease. Multiple emerging and reemerging tropical diseases,

particularly those that are zoonotic and vector-borne, will continue to cause multiple public health threats (Rodriguez-Morales et al.).

In summary, this Research Topic provides a frame of analysis for critical issues in emerging tropical infectious diseases, one of the most important current global challenges. One should always take into account that to carry out a good intervention in these tropical diseases, an integral approach must be followed, encompassing the environment, etiological agent, and host, which is the strategy of One Health (6).

Author contributions

All authors listed have made a substantial, direct, and intellectual contribution to the work and approved it for publication.

Conflict of interest

The authors JG-M, WV-G, and AR-M declared that they were editorial board members of Frontiers, at the time of submission. This had no impact on the peer review process and the final decision.

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References

1. El-Sayed A, Kamel M. Climatic changes and their role in emergence and re-emergence of diseases. *Environ Sci pollut Res* (2020) 27:22336–52. doi: 10.1007/S11356-020-08896-W
2. IPCC. *Climate change 2022: impacts, adaptation and vulnerability*. Pörtner HO, Roberts DC, Tignor M, Poloczanska ES, Mintenbeck K, Alegria A, et al., editors. Cambridge: Cambridge University Press (2022). Available at: <https://www.ipcc.ch/report/ar6/wg2/>.
3. Gomez-Marin JE, Pinto Y, Lora F, Mantilla-Meluk H. Recipe ingredients for re-emergent protozoa: climatic change, rain, zoonosis, mountain and food. *Infectio* (2022) 26(4):381–383. doi: 10.22354/24223794.1080
4. Gomez-Marin JE. Autonomía farmacéutica y biotecnológica frente a emergencias sanitarias. *Infectio* (2020) 24:199–200. doi: 10.22354/IN.V2414.875
5. Villamil-Gomez WE. Neglected tropic diseases: a reflexion in times of pandemic about how to intervene under the optics of one health. *Infectio* (2023) 27(2):69–77. doi: 10.22354/24223794.1124
6. Evans MV, Hintz CW, Jones L, Shiau J, Solano N, Drake JM, et al. Microclimate and larval habitat density predict adult *Aedes albopictus* abundance in urban areas. *Am J Trop Med Hyg* (2019) 101(2):362–70. doi: 10.4269/ajtmh.19-0220