The Evolving Scope of PLoS Neglected Tropical Diseases

Peter J. Hotez1,2*, Gavin Yamey3*

1 Department of Microbiology, Immunology, and Tropical Medicine, The George Washington University, Washington, D.C., United States of America, 2 Sabin Vaccine Institute, Washington, D.C., United States of America, 3 Public Library of Science, San Francisco, California, United States of America

* E-mail: mtmpjh@gwumc.edu or photez@gwu.edu (PJH); gyamey@plos.org (GY)

Citation: Hotez PJ, Yamey G (2009) The Evolving Scope of PLoS Neglected Tropical Diseases. PLoS Negl Trop Dis 3(2): e379. doi:10.1371/journal.pntd.0000379

Published February 24, 2009

Copyright: © 2009 Hotez, Yamey. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Funding: The authors received no specific funding to write this article.

Competing Interests: GY declares no competing interests. PJH is Co-Founder of the Global Network for Neglected Tropical Diseases. He is an inventor on two international patents on hookworm vaccines.

Peter J. Hotez is Editor-in-Chief of PLoS Neglected Tropical Diseases. He is Distinguished Research Professor, the Walter G. Ross Professor, and Chair of the Department of Microbiology, Immunology, and Tropical Medicine at The George Washington University, and President of the Sabin Vaccine Institute. Gavin Yamey is Senior Editor of PLoS Medicine and Consulting Editor of PLoS Neglected Tropical Diseases.

PLoS Neglected Tropical Diseases is an open-access community journal that serves the needs of a small but active and robust community of neglected tropical disease (NTD) scientists, clinicians, and public health and policy experts. As stewards of that community, our editorial staff has very much molded the journal according to what we have learned from you in terms of mission, priorities, and scope. In the eighteen months since the launch of PLoS Neglected Tropical Diseases, some of our most interesting editorial discussions and queries from authors are in regards to the journal’s scope, particularly the specific conditions defined as NTDs (http://www.plosntds.org/static/scope.action).

What has emerged from these discussions is a journal focused on a fairly specific group of important infections endemic in developing countries with seven common features [1, 2]: (1) the NTDs occur in the setting of poverty where they are the most prevalent infections afflicting “the bottom billion,” i.e., people living on less than US$1 per day [3]; (2) they are chronic conditions—people can harbor their NTDs for years or decades; (3) they generally disable, rather than kill; (4) they are frequently disfiguring and stigmatizing [4]; (5) they affect the poor, and they have been designated by some as “neglected infections of poverty” [7, 9]. In summary, we would consider almost any human helminth infections as an NTD and thus within the scope of the journal.

Protozoa

Similarly, most of the protozoan infections, including Chagas disease, leishmaniasis, human African trypanosomiasis, and many of the intestinal protozoan infections, are also considered NTDs. Conspicuous by its absence on the protozoan infection list is malaria. Certainly, no one would question the devastating global health impact of this disease, nor its predilection to affect the poor. Moreover, as with the NTDs, several investigators, including Jeffrey Sachs and others, have documented in some depth the poverty-promoting impact of malaria [9, 10]. We have chosen to omit malaria from our list of NTDs for three reasons. First, there is a comparatively large community of investigators working on malaria (in contrast to the smaller NTD research community). Second, while we acknowledge shortfalls in funding [11], there have been important infusions of funding and heightened advocacy for malaria control in recent times, including through the US President’s Malaria Initiative, The Global Fund to Fight AIDS, Tuberculosis, and Malaria, Roll Back Malaria, and several malaria advocacy groups, including Malaria No More (http://www.malarianonmore.org/).

Third, malaria researchers already have a very wide range of open-access venues for their work, including the other six PLoS journals, all of which have published studies on malaria, as well as the Malaria Journal, published by BioMed Central (http://www.malarialjournal.com/).

However, we continue to invite and publish malaria papers that examine malaria and NTD co-infection or co-endemicity, such as a recent study we published examining whether helminth infection in children affects malaria susceptibility [12] and another that surveyed trachoma and malaria together in Ethiopia [13]. In 2007, Ric Price and colleagues made a cogent argument for considering vivax malaria as a neglected disease and we largely agree with their comments [14]. But after some lengthy editorial discussions, we have decided for the moment to hold off on opening the door completely to papers on vivax malaria both because of the availability of other open-access journals that have malaria in their scope, as outlined above, and because of our concerns that the number of submissions...
on this topic would overwhelm the papers we are currently defining as NTDs. Having said that, we want *PLoS Neglected Tropical Diseases* to be a “living” journal that reflects the needs of the community and our scope will thus continue to evolve over time. Therefore, on a case-by-case basis we will consider papers on vivax malaria and related topics.

**Bacteria and Fungi**

When it comes to the bacterial infections, chronic infections such as leprosy, Buruli ulcer, and trachoma clearly qualify as NTDs. Similarly, leptospirosis, relapsing fever, and the treponematoses are important neglected bacterial diseases. We are not generally considering papers on tuberculosis for publication for much the same reason that we refrain from considering malaria papers, i.e., there is a sizeable group of comparatively well-funded experts in the field of tuberculosis and the disease falls in the scope of the other six *PLoS* journals. However, we are currently considering aspects of bovine tuberculosis that pertain to health in developing countries. Since the launch of *PLoS Neglected Tropical Diseases*, we have had several lively editorial discussions about the important enteric bacterial infections, such as cholera, salmonellosis, and shigellosis. After talking to several experts in the field, including Richard Guerrant and Gerald Keusch, we are now welcoming papers on these topics, particularly as they relate to disease in developing countries. We continue to consider papers on tropical fungal infections, as well as some selected non-infectious NTDs, such as podocniosis.

**Viruses**

We are not considering papers on HIV/AIDS unless they pertain to NTD co-infections—an example of a paper we have published on HIV-NTD co-infection was the systematic review by Judd Walson and Grace John-Stewart that examined whether treating helminth infection affects the prognosis of patients with HIV-1 [15]. Among the other viral infections, we now welcome papers on arboviral infections and have taken measures to add experts in this area on our editorial board. In addition, we recognize the importance of rabies as an NTD, as well as some of the viral hemorrhagic fevers. Our journal continues to publish papers on the insect vectors that transmit NTD pathogens, as well as papers on intermediate hosts such as snails.

We consider *PLoS Neglected Tropical Diseases* a work in progress that operates in an iterative manner in order to best serve the needs of the community. It is our hope that the journal will continue to attract new researchers to the field and, by its heavy representation of editorial staff from endemic countries, continue to build scientific and public health capacity in developing countries. We are working particularly hard to reach out to authors in low-income settings (see http://www.plosntds.org/static/developing.action), for example by providing additional editorial support to authors whose first language is not English. We are especially sensitive to supporting women in the sciences, medicine, and public health and this is also reflected in the composition of our editorial board. We further expect that papers published in the Magazine section will help to foster a cadre of NTD policy experts. From the number and quality of submissions received to date we feel that we are meeting those needs. At the same time, we very much want to hear from you about how we might continue to fine tune and improve the journal in order to ensure that open access continually enhances this important and vital pursuit. Please send us your feedback by adding your annotations to this article or starting a discussion thread using our innovative online tools.

**References**

1. Hotez PJ (2000) Forgotten people, forgotten diseases: the neglected tropical diseases and their impact on global health and development. Washington (D.C.): ASM Press; pp 215.
2. Hotez PJ, Molyneux DH, Fenwick A, Kumsron J, Ehrlich Sachs S, et al. (2007) Control of neglected tropical diseases. N Engl J Med 357: 1018–1027.
3. Hotez PJ, Fenwick A, Savioli L, Molyneux DH (2009) Rescuing the “bottom billion” through control of neglected tropical diseases. Lancet, In press.
4. Hotez PJ (2008) Nigana: the stealth weapon of the NTD. PLoS Negl Trop Dis 2: e280. doi:10.1371/journal.pntd.0000280.
5. Hotez PJ, Ottesen E, Fenwick A, Molyneux D (2006) The neglected tropical diseases: the ancient afflictions of stigma and poverty and the prospects for their control and elimination. Adv Exp Med Biol 582: 23–33.
6. Yamey G, Hotez P (2007) Neglected tropical diseases. BMJ 335: 269–70.
7. Hotez PJ (2007) Neglected diseases and poverty in “the other America”: the greatest health disparity in the United States? PLoS Negl Trop Dis 1: e149. doi:10.1371/journal.pntd.0000149.
8. Hotez PJ (2008) Neglected infections of poverty in the United States of America. PLoS Negl Trop Dis 2: e256. doi:10.1371/journal.pntd.0000256.
9. Sachs JD (2005) Achieving the Millennium Development Goals—the case of malaria. N Engl J Med 352: 115–117.
10. Sachs JD, Hotez PJ (2006) Fighting tropical disease. Science 311: 1521.
11. Snow RW, Guerrant CA, Mather HE, Hay SI (2008) International funding for malaria control in relation to populations at risk of stable *Plasmodium falciparum* transmission. PLoS Med 5: e142. doi:10.1371/journal.pmed.0050142.
12. Bejon P, Mwangi TW, Lowe B, Peshu N, Hill AVS, et al. (2008) Helenmich infection and eosinophilia and the risk of *Plasmodium falciparum* malaria in 1- to 6-year-old children in a malaria endemic area. PLoS Negl Trop Dis 2: e164. doi:10.1371/journal.pntd.0000164.
13. Emerson PM, Ngondi J, Bbru E, Graves PM, Ejigosahau Y, et al. (2008) Integrating an NTD with one of “the big three”: combined malaria and trachoma survey in Amhara region of Ethiopia. PLoS Negl Trop Dis 2: e197. doi:10.1371/journal.pntd.0000197.
14. Price RN, Tjitra E, Guerra CA, Yeung S, White NJ, et al. (2007) Vivax malaria: neglected and not benign. Am J Trop Med Hyg 77(Suppl 1): 79–87.
15. Walson JL, John-Stewart G (2007) Treatment of helminth co-infection in individuals with HIV-1: a systematic review of the literature. PLoS Negl Trop Dis 1: e102. doi:10.1371/journal.pntd.0000102.