The struggle between humans and parasites

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The battle between humanity and parasites is a constant struggle. As parasites grow stronger by developing immunities, new treatments must be created in response. On the frontlines of this struggle are parasitologists, scientists who specialize in studying various parasites (including insects, worms, viruses, and bacteria) and their hosts.

The article "Anthelmintic Drug Discovery: Into the Future," in the *Journal of Parasitology* surveys both the history and the future of developing antiparasitic drugs, focusing on those that destroy or expel intestinal worms. The authors believe that the current paths taken by many researchers and drug companies are lacking in direction; they need new methods to get ahead of the struggle instead of reacting to each new case as it arises.

Learning more about the fundamental biology, biochemistry, and physiology of parasites will aid in more precisely targeted screenings when searching for illnesses. Another goal is to include more quality checks during the drug discovery phase; such procedures would allow ineffective compounds to be rejected earlier and research to proceed on those with real value. Researchers are hindered by the lack of acceptable life-cycle stages of parasites for drug research and would like to develop an egg-to-egg culture system. Such a development could revolutionize the understanding of host-parasite relationships and lead to developing stronger and more useful medicines.

More information: "Anthelmintic Drug Discovery: Into the Future." *Journal of Parasitology*: April 2015, Vol. 101, No. 2, pp. 125-133. doi:

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