

# Trends in Parasitology

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**On the cover:** Microscopy image analysis is critical in parasitology research because it allows researchers to analyze parasite shape, function, and life cycles. Traditional artificial intelligence (AI) methods often have limitations due to their black-box nature and lack of integration with human expert knowledge, which impedes their explainability and performance. In this issue of *Trends in Parasitology*, Feng *et al.* review the recent advancements in knowledge-integrated AI models for the analysis of parasite microscopy images. By incorporating expert knowledge from parasitologists into AI, the resulting knowledge-integrated models can offer both high accuracy and explainability. This synergy is especially important in parasitology, where the correct identification of parasites is crucial for the treatment and control of the disease. The cover image represents the partnership between AI and parasitologists, demonstrating how this paradigm leads to better diagnostics and research in parasitology. Image credit: Sen Li.

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