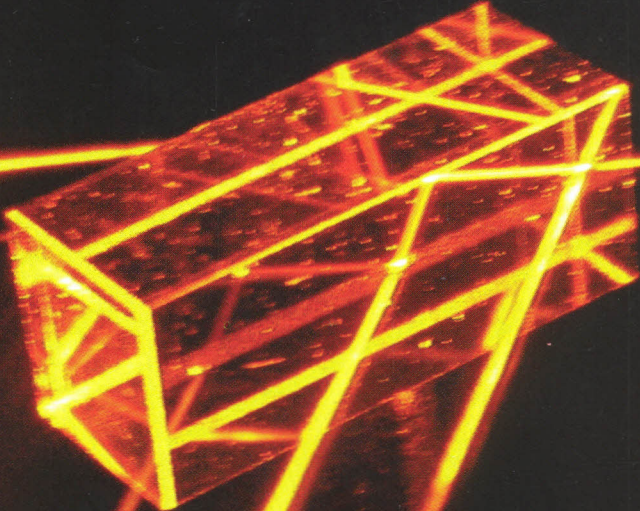


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Nature's salary survey (p. 1104) reveals inequalities aplenty.

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CHAGAS DISEASE



Produced with support
from the UK
Health Research
Council and Wellcome

A new era of hope for
this neglected disease

Chagas disease is one of the most neglected of the tropical diseases, affecting millions worldwide. New initiatives and advances in science provide fresh hope that it might soon be brought under control.



The Médecins Sans Frontières Chagas Bus, which travelled throughout Bolivia in 2009, p. S21.

CHAGAS DISEASE

CONTENTS

S4 Chagas disease 101

Julie Clayton

It is 101 years since Carlos Chagas discovered the parasite responsible for the disease that now bears his name. Yet it is largely neglected and few people are aware of it. Here is the low-down on Chagas disease: the parasite, the vector, the treatments and the controversy.

S6 Chagas disease: a new worldwide challenge

José Rodrigues Coura and Pedro Albajar Viñas

Previously a disease mainly of animals, Chagas disease became established as a human disease only a few hundred years ago. Since then it has spread from infecting mainly the rural poor to urban transmission throughout Latin America. With the growth in international travel and migration, Chagas disease is now crossing oceans and is becoming a worldwide threat to health.

S8 Who, how, what and where?

Mapping the prevalence of Chagas disease in Latin American and the distribution of the different strains and primary vectors.

S10 Country by country

Anna Petherick

Each of the 21 affected Latin American countries deals with Chagas disease in its own way. Most countries are part of at least one of the international vector control initiatives, and many have their own programmes to monitor, diagnose and treat the disease. However, for a variety of reasons — some deliberate, some incidental — reliable data are hard to come by.

S12 Chagas disease: pushing through the pipeline

Julie Clayton

There are two drugs available to treat Chagas disease. Both were developed >40 years ago and neither is perfect: they require long treatment periods, cause unpleasant side effects and are available only in adult formulations. However, there is a fresh drive to develop new drugs and find improved regimens for the existing ones. A recent unusual case study is a timely reminder that many drugs for other conditions might have utility in Chagas disease.

S16 The promise of *T. cruzi* genomics

Julie Clayton

In 2005 the genomes of one of the strains of *Trypanosoma cruzi*, which is the causative agent of Chagas disease, along with two closely related parasites were completed. Alongside helping drug-discovery target-identification efforts, a better understanding of *T. cruzi*'s genome has had an impact in other areas such as epidemiology.

S18 Chagas disease in the Chaco

Anna Petherick

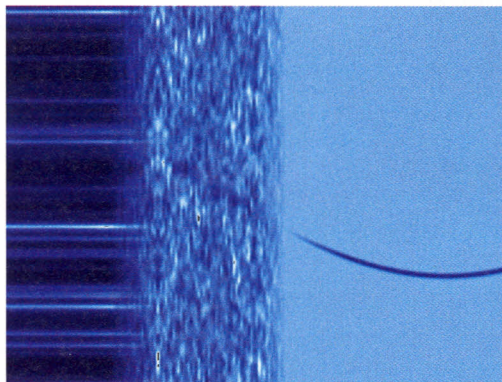
Efforts to control the vectors of Chagas disease might seem impressive on paper, but the reality in rural locations around Latin America is very different. One of the most important elements is understanding the culture and circumstances of the people most at risk — not to mention negotiating with the governmental agencies to get the necessary supplies.

S21 Campaigning for Chagas disease

Anna Petherick

There is a lack of awareness and some might say a lack of concern about Chagas disease among not only the politicians but also the at-risk populations. However, there are attempts to improve both of these shortfalls, particularly by building support from within the communities — but it is hard work.

The orbit of an exoplanet (far right panel) has been derived from its CO transmission spectrum (near right). Pages 1049, 1017.



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K Ko *et al.* [doi:10.1038/nature09089](#)

Reply: S Conrad *et al.* [doi:10.1038/nature09090](#)

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