

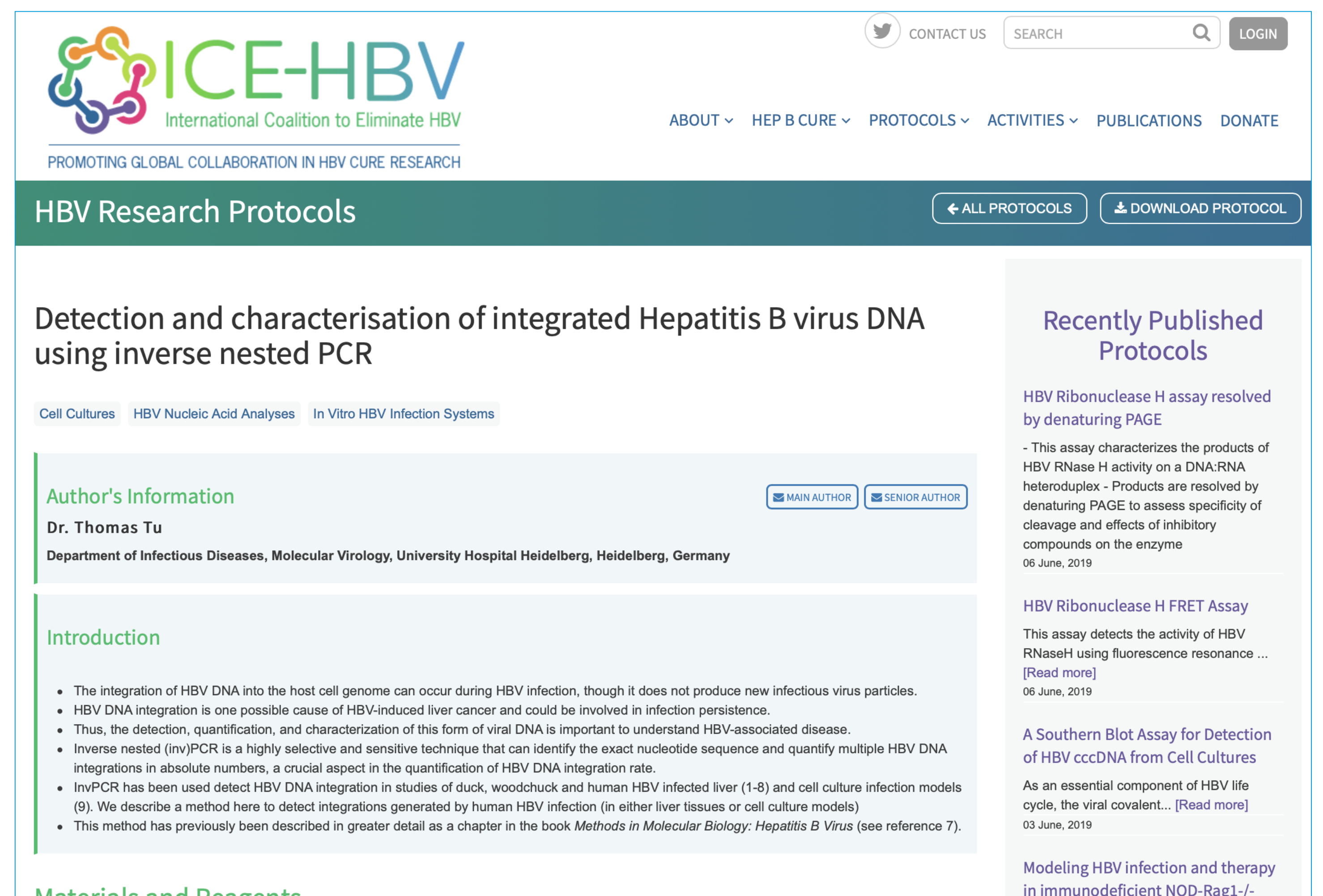
BACKGROUND

(1). International Coalition to Eliminate HBV (ICE-HBV), Melbourne, Australia (2). Victorian Infectious Diseases Reference Laboratory, Royal Melbourne Hospital at the Peter Doherty Institute for Infection and Immunity, Melbourne, Australia (3). INSERM, Lyon, France.

The hepatitis B virus (HBV) kills over 880,000 people each year, and as such there is an urgent need for a cure. To expedite its discovery, the International Coalition to Eliminate HBV (ICE-HBV) has created an open-access centralized repository of HBV research protocols to support the acceleration of HBV cure research. Enabling global access to critical tools will accelerate drug development and curative research. The issue of matching data on HBV can be addressed if researchers have the ability to work concurrently using the same protocols and materials. Our aim is to advance the discovery of an HBV cure and bring together research groups internationally by enabling accurate replication of research methods using standardized protocols that are freely and publicly available worldwide.



The screenshot shows the ICE-HBV website home page. It features the logo, navigation menu (ABOUT, HEP B CURE, PROTOCOLS, ACTIVITIES, PUBLICATIONS, DONATE), and a search bar. The main content area is titled "HBV Research Protocols" and includes a brief introduction, a search bar, and a "Refine protocols" section with checkboxes for various assay types like Animal Models, Cell Cultures, and HBV Antigen Analyses.



The screenshot shows a specific research protocol page titled "Detection and characterisation of integrated Hepatitis B virus DNA using inverse nested PCR". It includes author information for Dr. Thomas Tu, an introduction section, and a "Recently Published Protocols" sidebar with links to other articles like "HBV Ribonuclease H assay resolved by denaturing PAGE".

RESULTS

- Complementing the upcoming repository of infectious disease materials from the National Institute of Allergy and Infectious Diseases (NIAID), the ICE-HBV has developed an open-access online database for HBV research protocol sharing.
- The ICE-HBV database is available publicly and globally for scientists, clinicians and companies to conduct quality-controlled HBV research and facilitate data matching and comparison. At the time of creation of this poster there are 13 protocols on the database.
- Key areas included in the HBV cure research protocols database include: large-scale production of infectious HBV from cell clones; standardized protocols for assaying rcDNA, cccDNA and reference standards; human stem cell derived hepatocytes; standardized protocols for Elispot, intracellular cytokine staining, proliferation and CTL assays; and more.

METHODS

To achieve this, the ICE-HBV has collaborated with over 50 scientists in 21 countries to create the online open-access database. Research groups can submit their own research protocols for others to use and improve. These protocols are quality controlled by a committee led by Haitao Guo (Indiana University School of Medicine) before publication.

CONCLUSIONS

This collaborative, open-access database will accelerate curative HBV research as it enables concurrent studies to be performed using the same protocols producing readily comparable results. It can be found at ice-hbv.org/protocols

SPONSORS

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