

2009 Annual Report



Hepatitis B Foundation

Institute for Hepatitis and Virus Research

Research

Public Health

Outreach

Advocacy



...dedicated to finding a cure and improving the quality of life
for those affected by hepatitis B worldwide...

Dear Friends,

This annual report is intended to provide a summary of the year, as well as to celebrate accomplishments that will allow us to achieve our goal of improving the lives of those affected by hepatitis B.

Five years ago the Hepatitis B Foundation established two ambitious tactical objectives: For outreach, we proposed to become the world's leading portal of information about HBV; for research, we planned to become one of the nation's centers of HBV research.

This report describes how we have succeeded.

Today, we are a primary resource for information about HBV and our website www.hepb.org receives 1 million visits from 180 countries.

We also probably have the largest concentration of HBV scientists working together through the creation of our research institute – the Institute for Hepatitis and Virus Research (IHVR) – and partnership with Drexel University.

With 23 principal investigators (13 working in IHVR labs and 10 sponsored by HBF in Drexel labs) and additional research support staff, we are now under one roof in the PA Biotechnology Center that we created to accelerate our research mission.

Although the economy took a dip this year, the need for helping those with HBV remained constant. We did not relax nor reduce our effort. Please enjoy reading about our achievements this year, and know that we look forward to the new opportunities in 2010!

With appreciation and gratitude,



Joel Rosen, Esq.
Chairman of the Board



Timothy M. Block, Ph.D.
Co-Founder and President

The Hepatitis B Foundation is a national nonprofit organization dedicated to finding a cure and improving the quality of life for those affected by hepatitis B worldwide. Our commitment includes funding focused research, promoting disease awareness, supporting immunization and treatment initiatives and serving as the primary source of information for patients and their families, the medical and scientific community and the general public.

Hepatitis B Foundation

Institute for Hepatitis and Virus Research

YEAR IN REVIEW*

(Fiscal Year 2009 ending June 30, 2009)

Revenue (Total \$4,709,656)

Grants **88%**
\$4,139,418



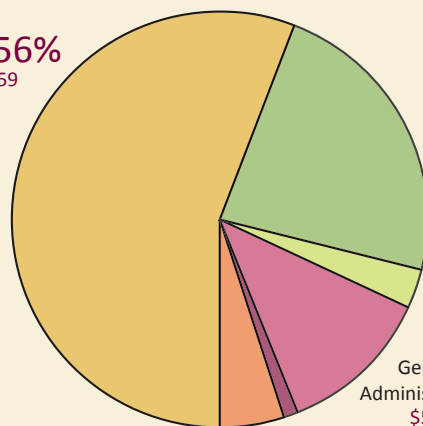
Charitable Contributions **7%**
\$365,902

Interest **>1%**
\$14,894

Other **4%**
\$189,442

Expenses (Total \$4,456,180)

Research **56%**
\$2,501,259



Outreach and Education **23%**
\$1,058,149

Biotechnology Outreach **3%**
\$138,990

General and Administrative **12%**
\$533,479

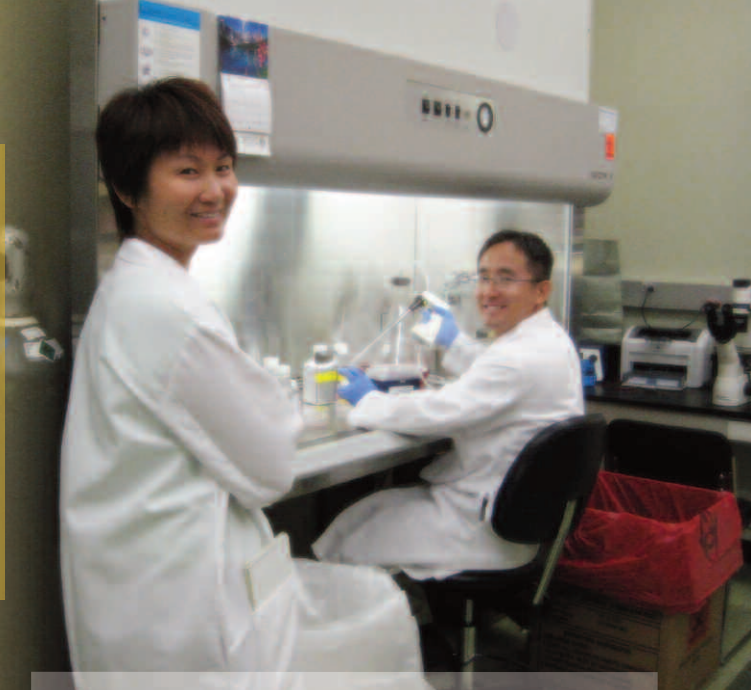
Development **1%**
\$21,131

Public Health **5%**
\$203,172

* This audited financial information includes revenue and expenses from HBF and its research institute IHVR, but excludes the Foundation's 50% ownership (or \$6.9 million) in the PA Biotechnology Center valued at \$13.8 million as per audited statements.

Research

We are bringing hope through research by funding our own research institute – the Institute for Hepatitis and Virus Research...



Scientific Discoveries and Innovations

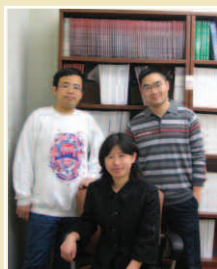
This has been a year of outstanding accomplishments, in which our lead diagnostics for cirrhosis and liver cancer have moved closer to human use, and our basic science discoveries have led to new strategies for intervention. Our research receives support from the National Institutes of Health and Commonwealth of Pennsylvania. We carry out our work with scientists from IHVR and Drexel University working together at our research center in Bucks County, PA.



The HBF/IHVR research program is led by Dr. Timothy Block, HBF president and Drexel professor, in collaboration with Dr. Anand Mehta, IHVR adjunct faculty and Drexel associate professor.

International Research Exchange Program

Scientists Without Borders is a new international research exchange program launched by the HBF to train graduate level students so they can return to their country armed with the knowledge and research technology to address this global health problem. HBF is currently sponsoring three graduate and medical students from China.



SCIENTIFIC BREAKTHROUGHS

Early Detection of Cirrhosis and Liver Cancer

Early detection of these serious diseases is the best way of improving outcomes and our biomarkers are under agreement with a major U.S. diagnostic company offering the hope that they will be available for patient use in the near future.

- **Hepatocellular carcinoma (primary liver cancer)** Our biomarker results have been confirmed in a multi-center study. Reported in *Proceedings of the National Academy of Sciences, Hepatology, Proteomics, J. of Hepatology* as well as praised in reviews in *J. of the National Cancer Institute* and *Nature Medicine*.
- **Fibrosis and Cirrhosis** Our noninvasive biomarker gives hope that liver biopsies will be less necessary and disease can be followed more easily. Reported in *Gastroenterology* and *J. Virology*.
- **Detection of HBV Mutants and Liver Cancer Proto-Oncogenes** We have developed highly sensitive PCR-based approaches to detect HBV mutants, which should have considerable clinical value. Reported in *J. Viral Hepatitis*.

Drug Discovery for HBV and Liver Cancer

Therapeutic options for hepatitis B are of very limited value and there are no good ways to treat primary liver cancer.

- **HBV Antivirals** Our search for novel HBV antivirals by screening compounds already shown to be safe in people have led to several “in-vitro” lead compounds. Reported in *J. Virology*.
- **Primary Liver Cancer Drugs** We have screened more than 86,000 compounds for activity against liver cancer and one was found to have impressive activity in culture.

- **Liver Carcinoid Drug Completes Phase II Human Trials** Atiprimod, co-developed by HBF/IHVR scientists and being developed by Callisto Pharma, has now been used to treat more than 40 people with liver carcinoids. Reported at *BIO 2009*.
- **Liver Cancer Screen Leads To New Glucovirs with 100 Times Improved Activity** Glucovirs were identified by IHVR and Oxford scientists for activity against HBV and were shown in early studies to be active in people for HCV treatment. They have now been developed with 100 times the original activity. Reported in *Antimicrobial Agents Chemo*.

Understanding HBV Disease

This program seeks to identify new targets for therapeutic intervention by studying the molecular mechanisms of chronic HBV infection and liver cancer.

- **Identification of Interferon (IFN)-Induced Genes that Inhibit HBV and HCV** We have established a new system that express individual IFN-stimulated genes and identified liver cell proteins that inhibit HBV and HCV. Reported in *J. Virology*.
- **Novel System to Search for Drugs that Inhibit cccDNA Formation** We have identified a viral DNA intermediate in cell culture as a potential precursor for cccDNA and mapped the molecular pathway for the HBV cccDNA. Reported in *J. Virology*.

Summer Research Internship Program Trains Future Scientists



HBF offers high school and college students the opportunity to work in its state-of-the-art laboratories for a hands-on experience to introduce them to careers in the fast growing

fields of biomedical research, public health and biotechnology. More than 100 students apply for these competitive internships and we gratefully acknowledge support from the *Merck West Point Charitable Contributions Committee* and the *Charles Sigety Family Foundation* that help fund this program.

Annual International HBV Meeting

Coordinated by Hepatitis B Foundation

In 2005 the HBF was asked to take over the responsibility of coordinating this annual meeting that has brought scientists together from around the world to discuss the biology of HBV. For its 25th anniversary in 2010, the meeting will be held in Asia for the first time . . . in Taiwan!

Nobel Scientist in Residence

HBF Distinguished Scholar Dr. Baruch Blumberg, who won the Nobel Prize in Medicine for his discovery of the hepatitis B virus and invention of the hepatitis B vaccine, regularly meets with HBF staff, scientists and students every month to share his experience and wisdom, and to keep abreast of current developments in public health and research being conducted at the HBF.



Students meet with Dr. Baruch Blumberg and Dr. Thomas London.

HBF Distinguished Scientist Award 2009



Dr. Brian McMahon (center) received the HBF's Distinguished Scientist Award 2009 at our Crystal Ball for advancing the science and medicine of hepatitis B. HBF chairman Joel Rosen (left) and HBF president Dr. Timothy Block (right) presented the award.

Bruce Witte Lecturer 2009

Dr. Stephen Locarnini (left) gave the *8th Annual Bruce Witte Lecture* about "The Virology of Hepatitis B Immunomodulation and Therapy." The lecture series was established by **Paul and Janine Witte**, HBF co-founders, in memory of Bruce Witte. *Past Witte lecturers include Drs. Raymond Dwek, John Gerin, Raymond Schinazi, Frank Chisari, Ben Yen, Stan Lemon and Rafi Ahmed.*



Outreach

We are touching thousands of lives through our Outreach Services...

Reaching Out to Patients and Families Affected by Hepatitis B

HBF continues to offer the only national **B Informed Patient Conference** for those living with chronic hepatitis B. Since 2001, we have listened to the needs of the patients and families we serve. Today, we alternate the annual conference on the east and west coasts; provide “in-language” educational sessions and free screenings for at-risk ethnic populations (e.g. Chinese, Korean and Vietnamese); added expert pediatric liver specialists to address parent concerns; and partner with two valuable online support groups, the *Hepatitis B Information and Support List* and the *HBV Adoption List*. Future plans include taking “B Informed on the Road”!



The annual B Informed Patient Conference hosted by HBF was held in Doylestown, PA (June 2009).

This year’s expert speakers included keynote speaker **Dr. Mack Mitchell** from Johns Hopkins (update on HBV treatment); **Dr. Michael Fried** from U. of North Carolina (NIH HBV Clinical Research Network); **Dr. Kenneth Rothstein** from Drexel U. (HBV and liver cancer); **Dr. Thomas London** from Fox Chase Cancer Center (Expert FAQs); and **Dr. Timothy Block** from Drexel U. (HBV drug watch).



Take a Look Inside Our Website @ www.hepb.org

The HBF is continuously growing our site to provide a rich and informed experience. We believe that integrating information access among providers, patients, and the scientific community is the first step to disease management and future cure. Some of our user-friendly features currently include: Podcasts, Videos, Translated Language Chapters (Chinese, Korean, Vietnamese, Spanish, and Turkish), Multi-media Learning Guides, Expert Speaker Forums, Online Newsletters, Liver Specialist Directory (U.S. and international), Drug Watch, Clinical Trials, and copyright free Educational Materials. Visit www.hepb.org regularly for updates and new information that you can use!

Hepb.org FAST FACTS

- Almost 1 million visits each year from 180 countries
- 49% of visitors live outside the U.S.
- Top 5 visited Website pages
 1. Prevention and Vaccination
 2. Treatment Options
 3. What is Hepatitis B
 4. HBV Drug Watch
 5. Frequently Asked Questions
- Most visited Language Chapter is the Turkish translation

Public Health

We are working to improve access to care for those affected through our Public Health programs...



Good Health, Happy Family

“Good Health, Happy Family” was launched as part of the HBF’s public health campaign to increase awareness about hepatitis B and improve screening rates among the at-risk ethnic communities in Philadelphia. During the 14th annual Chinatown Mid-Autumn Festival in



Philadelphia in September, the HBF organized free health screenings that attracted 350 people. With the help of 60 medical student volunteers to staff and provide bi-lingual language capabilities, HBF offered blood pressure, blood glucose, osteoporosis and hepatitis B testing.



60 medical students from the Asian Pacific American Medical Student Association (APAMSA) volunteered at the HBF’s free screening program in Philadelphia’s Chinatown which attracted 350 people (Sept. 2009).

National Pediatric Hepatitis B Workshop

The National Pediatric Hepatitis B Workshop was first convened November 2008 by the HBF to bring together an expert panel of pediatric liver specialists to establish clear recommendations for the care and management of children with chronic hepatitis B since there are currently no national guidelines. A second workshop was convened August 2009 to establish additional recommendations for the treatment of affected children.

The recommendations from the first workshop were published in *J. of Pediatrics* (Nov. 2009), and free copies of the article are available by sending us an email at info@hepb.org.

Gateway to Care

HBF’s ambitious *Gateway to Care* public health campaign seeks to raise awareness about hepatitis B and improve access to care through education, free screenings, and creation of a Philadelphia Hepatitis B Task Force.



Advocacy

We are advocating for increased federal support and seek to make hepatitis B an urgent health priority in this country...



HBF Sponsors Congressional Briefing on World Hepatitis Day!

On May 19, HBF sponsored its 5th annual Congressional Briefing in Washington, DC to put the spotlight on the deadly link between chronic hepatitis B and liver cancer. More than 70 people attended the briefing which included members of Congress, expert presentations, and patient testimony.

Increased national attention and funding is urgently required for the care and treatment of the 6 million Americans living with chronic hepatitis B and hepatitis C who, without federal intervention, will die prematurely from either end-stage liver disease or liver cancer.

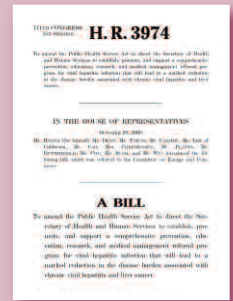


Experts from the NIH and CDC participated in the HBF Congressional Briefing on May 19, 2009.

L to R: Dr. Katherine McGlynn, NCI/NIH; Shannon Morris, personal testimony; Chris Taylor, NVHR chair; Dr. Timothy Block, HBF president; Dr. John Ward, director, CDC Division of Viral Hepatitis; Dr. Ira Jacobson, chief, Gastroenterology and Hepatology, Weill-Cornell Medical College; Jeffrey Caballero, AAPCHO executive director.

Hepatitis and Liver Cancer Bill Introduced in Congress

The *Viral Hepatitis and Liver Cancer Control and Prevention Act (HR 3974)* was introduced in Congress by **U.S. Representatives Mike Honda** [(D-CA) see photo above] and **Charles Dent** (R-PA) in October, which represents the first legislation to address both HBV and HCV!



Pennsylvania Legislators Support HBV and Liver Cancer Research

Our advocacy efforts at the state capitol have earned the respect of Pennsylvania legislators and, with the full support of the Bucks County delegation, we have been given the opportunity to significantly advance our research and outreach mission.



L to R: PA state Rep. Kathy Watson, state Rep. Marguerite Quinn, and PA Congressman Patrick Murphy (far right).

PA state Senator Chuck McIlhinney was the Keynote Speaker at the HBF/IHVR annual biotech conference.



Board of Directors

Chairman

Joel Rosen, Esq.

President

Timothy M. Block, PhD

Vice President

W. Thomas London, MD

Treasurer

R. Donald Leedy, MBA

Secretary

Janine Witte

Joan M. Block, RN, BSN

Thomas Block

Stanley Broadbent

Alan Brownstein, MPH

Sandra Budinsky

James Datin

Kimberly Jungkind, RN, MPH

Dale Kindregan

Charles Sigety, Esq.

Gurney Sloan, Esq.

Catharine Williams, MGA



The PA Biotech Center was created by the HBF to accelerate its research mission, and houses both its offices and IHVR labs.

Medical and Scientific Advisors

Harvey Alter, MD

Timothy M. Block, PhD

Baruch Blumberg, MD, PhD

Carol Brosgart, MD

Nathaniel Brown, MD

Raymond Dwek, D Phil, FRS

Lawrence Friedman, MD

Robert Gish, MD

Hie-Won L. Hann, MD

W. Thomas London, MD

William Mason, PhD

Brian McMahon, MD

Kenneth Rothstein, MD

Raymond Schinazi, PhD

Bud Tennant, DVM

Senior Research Faculty

Alex Birk, PhD

Baruch Blumberg, MD, PhD

Songming Chen, PhD

Andrea Cuconati, PhD

Surendra Dheer, PhD

Sergey Ilyin, PhD

Ramila Philip, PhD

Allen Reitz, PhD

David Ren, MD, PhD

Patrick Romano, PhD

Thomas Russell, PhD

Kunwar Shailubhai, PhD

James Thacker, PhD

Michael Xu, PhD

Biotechnology Faculty

Ethan Byler, MGA

Mohan Philip, PhD, MBA

Adjunct Research Faculty

These Drexel U. senior research faculty members are supported in part by HBF/IHVR funds

Jinhong Chang, MD, PhD

Mary Ann Communale, MS

Alison Evans, ScD

Haitao Guo, PhD

Ju-Tao Guo, MD

Xuanyong Lu, PhD

Anand Mehta, D.Phil

Tulin Morcol, PhD

Pamela Norton, PhD

Ying-Hsiu Su, PhD

Executive Director

Joan M. Block, RN, BSN

Director of Finance/Accounting

Patricia McAloon, MBA

Director of Operations

Konrad Kroszner

Director of Programs

Margaret Farley

Gang Chen, PhD

Associate Director of Public Health

Chari Cohen, MPH (DrPh candidate)

Sr. Public Health Research Manager

Richard Kahn (MPH candidate)

Public Health Associate

Jill Aquino

Community Relations Manager

Lauren Nonini

Project Coordinator

Loretta Molle

Accountant



Hepatitis B Foundation

3805 Old Easton Road

Doylestown, PA 18902

Phone: (215) 489-4900 Fax: (215) 489-4920

www.hepb.org