



Maintaining Momentum *thru* Challenging Times

CONTENTS

- Letter from Tim Block and Joel Rosen
- Blumberg Institute research
- Expanding our home and research facilities
- Outreach and patient education
- Public health programs
- Pandemic responses, statement from our advisors
- Hep B United impact
- Going global with storytelling
- Patient-Focused Drug Development
- New award for advocacy given to Joan and Tim Block
- Thank you to our donors
- Financial report
- Our leadership

This has, in many ways, been the longest year.

The COVID-19 pandemic has dealt a painful blow to world health and prosperity, but it has also shown us at least two very important things:

First, **development of the COVID-19 vaccine** makes it clear just how much can be accomplished when there is will and sufficient investment.

Second, despite remarkable success in scientific discovery in vaccine development, it is also clear how useless that all is in the absence of a robust public health infrastructure.

These two facts are immediately relevant to the **Hepatitis B Foundation's** mission; with enough investment, there is no doubt that there will be breakthrough medical advances in curing hepatitis B, D, and liver cancer. **The Baruch S. Blumberg Institute's** (the Foundation's research organization) contributions to cure research are here for that reason. Just as important is what the HBF is doing to build public health programs for linkages to care. These infrastructures will enable outreach and could even surge in times of more general public health need.

Yes, the COVID-19 pandemic changed life for everyone this year. But one thing it didn't change was our commitment to our mission, which is to improve the quality of life of those affected by hepatitis B and the diseases with which it is associated.

We are in our 30th year and have never ceased going full throttle on this mission. Even during the pandemic year, the Foundation has had a breathtaking number of accomplishments and activities. These are described more fully in this report but include some big firsts:

- ✓ The first-ever Externally Led Patient-Focused Drug Development Meeting on hepatitis B, in partnership with the U.S. Food and Drug Administration. This brought both attention and useful data to the question of what drugs and clinical trials those with hepatitis B need, expect and, frankly, will tolerate. We went virtual (because of the pandemic) but this allowed for participation of more than 650 people. The findings are being reported in virtual town halls, webinars, and journals, and are hotly sought after by people living with hepatitis B, nongovernmental agencies, and of course, the biopharmaceutical industry.
- ✓ Another first: The pandemic is forcing more and more of us to use telemedicine, and it's making hepatitis B experts more and more available worldwide. Along these lines, the Foundation introduced our first-ever training with the "ECHO" model (a telemedicine format for continuing education about hepatitis B for physicians and other health care professionals).

Despite the strange times (or perhaps because of them), we are also finding an uptick in interest in HBV from patients, pharma scientists and donors/investors.

Take a look at the HepIndex which has doubled since its creation in October 2020 (at \$759, very recently). This is a "Dow Jones"-like aggregate of stocks of companies focused on HBV we put together. Increased interest is also reflected by the number of consults the Foundation does online as well as "investor" calls we receive, asking about the HBV and HCC investigational landscape.

We at the Blumberg are ready for the new surge of demand. We're really excited about the wave of new discoveries that are developing—*here*. As described in this report, we have had important fundamental discoveries involving how HBV cccDNA is transcriptionally repressed, new targets for antiviral action on HBV surface protein, and even new and improved HBV capsid inhibitors.

This has also been a year of tremendous success and progress for the **Pennsylvania Biotech Center (PABC)**. The Foundation created the PABC to be its home and to provide an environment in which its research programs could thrive. The Center also serves as an incubator for startup companies, both those launched to commercialize our research and others begun by outside scientists, especially from area universities. The Foundation and Blumberg Institute are (as planned) the keystone residents of the PABC, which is more than 110,000 ft² of labs, offices and instructional space, on our own 14-acre campus.

As with the rest of the nation, the pandemic shook up the region's economy, and, just as with the 2008 recession, unfortunately many jobs were lost. However, the PABC was able to operate safely, with restrictions, and even with our new building scheduled for a Fall 2021 opening, the PABC is expected to be oversubscribed for space, with several new HBV, liver disease, and cancer-oriented companies.

This has certainly been a long year, but we think you will find the Foundation and its research organizations have made more than the best of it and are now in one of the best positions we have ever been in to make breakthrough contributions.

Sincerely,

Timothy M. Block, PhD ▶

President of the Hepatitis B Foundation and its research organizations, Baruch S. Blumberg Institute and Pennsylvania Biotechnology Center, and



Joel Rosen, JD ▶

Chair of the Board, Hepatitis B Foundation



On behalf of:

Wayne Yetter

Chair of the Board, Baruch S. Blumberg Institute, and

Loren Danzis, JD

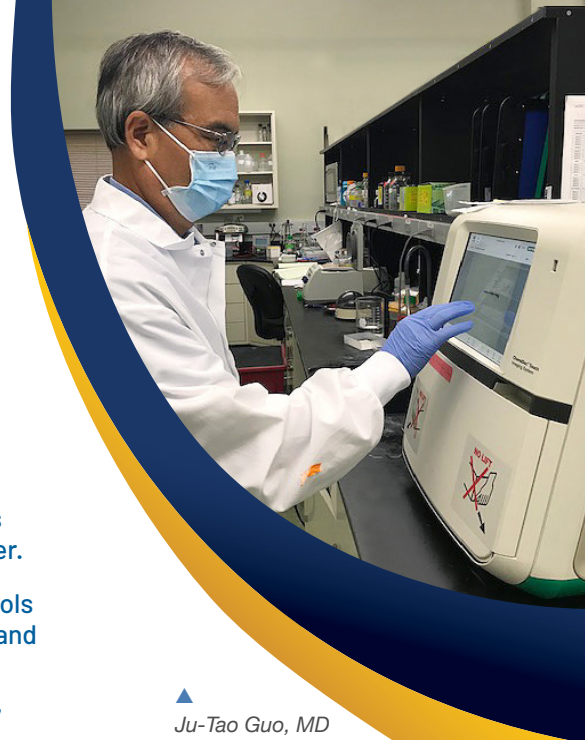
Chair of the Board, Pennsylvania Biotechnology Center

Blumberg Institute research Leading the Way to a Cure

The Baruch S. Blumberg Institute is the research arm of the Hepatitis B Foundation, responsible for fulfilling the promise of finding new therapies and improved methods of detection for chronic hepatitis B and liver cancer.

The Blumberg has a history of providing critical breakthrough research tools and new, investigational drugs. Several of the hepatitis B antiviral assays and drugs in clinical development today have origins at the Blumberg.

In 2020, the Blumberg and colleagues at the Foundation had more than 27 scholarly publications, two clinical trials resulting from our work, an all-new technique was developed to detect cancer non-invasively, and at least two new compounds were identified with cancer and HBV therapeutic activity.



▲
Ju-Tao Guo, MD
photographed at work
in his laboratory

Five-year retrospective on W. Thomas London Distinguished Professorship

The W. Thomas London Distinguished Professorship was created in 2015 to recognize the extraordinary contributions of internationally renowned physician-scientist, W. Thomas London, MD, who died in 2017.

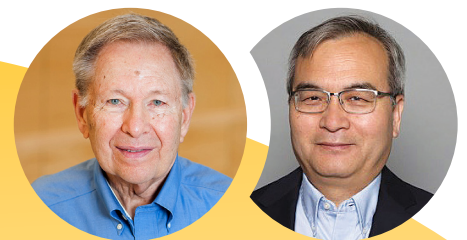
A key member of the research team that discovered the hepatitis B virus in the early 1960s, Dr. London was a longtime member of the Board of the Hepatitis B Foundation and the Baruch S. Blumberg Institute, where he was a distinguished scientific and medical advisor.

Dr. London's seminal contributions were "world changing in magnitude, but done quietly, and modestly," said Nobel Prize winner Harvey Alter, MD, an eminent scientist at the NIH and co-discoverer of the hepatitis B and C viruses.

A professorship is among the highest academic awards granted to any faculty member and it was quite fitting that the highly accomplished Ju-Tao Guo, MD, was named Chair at the inception of the W. Thomas London Distinguished Professorship.

After receiving his doctorate from Lanzhou University School of Medicine in China, Dr. Guo did postdoctoral training with Blumberg Prize winner Dr. Christoph Seeger at Fox Chase Cancer Center in Philadelphia.

Dr. Guo has focused his work on the *molecular pathogenesis and antiviral research of hepatitis viruses, flaviviruses and human coronaviruses*. He has published more than 90 peer-reviewed research papers, review articles, commentaries, and book chapters in the related fields.



▲
W. Thomas London, MD
Courtesy of Fox Chase
Cancer Center

▲
Ju-Tao Guo, MD
Courtesy of Baruch S.
Blumberg Institute

"The W. Thomas London Distinguished Professorship is imbued from the outset with a legacy of scientific integrity and achievement that will inspire the occupants of this professorial chair for generations to come."

TIMOTHY BLOCK, PhD

Major achievements in the last five years at Dr. Ju-Tao Guo's laboratory

This research has been supported by the National Institutes of Health, Department of Defense, Arbutus Biopharma and the W. Thomas London Distinguished Professorship

- 1 The team has identified host cellular proteins required for key steps of HBV replication, such as pre-genomic RNA packaging and synthesis of covalently closed circular (ccc) DNA.
- 2 They discovered interferon alpha-induced cellular proteins that epigenetically suppress the transcription of cccDNA minichromosome.
- 3 HBV capsid assembly modulators (including the compounds discovered from our laboratory) are currently in preclinical and clinical development for treatment of chronic hepatitis B. The team found that this class of compounds not only disrupt capsid assembly, but also induce the premature disassembly of HBV nucleocapsids, which results in the inhibition of cccDNA synthesis. Therefore, the CAMs inhibit HBV replication via dual mechanisms. Fig 1
- 4 A structural motif of HBV small envelope protein essential for the morphogenesis of subviral particles (SVP) has been identified, which paves the way for the discovery of antiviral agents that can specifically inhibit SVP production and facilitate the functional cure of chronic hepatitis B.
- 5 Dr. Guo and his team have demonstrated that activation of STING in both macrophages and hepatocytes efficiently suppresses HBV replication and they have discovered two chemotypes of small molecular human STING agonists for further preclinical development.

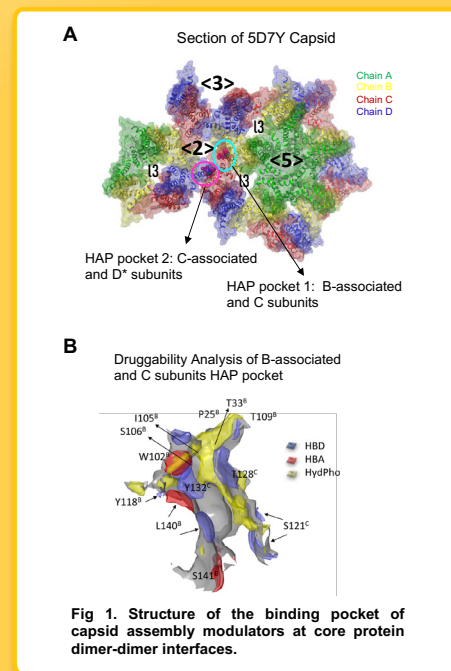


Fig 1

Additional projects being conducted by Blumberg researchers

Novel STING Agonists: A Potential Cure for HBV and Liver Cancer

From the lab of J. Chang, with Y. Du and J.T. Guo: We discovered new STING agonists that are highly effective in turning on an immune response against HBV and cancers. Activation of STING with small molecular agonists not only induces the production of antiviral cytokines that restrict viral replication, but also activates a powerful adaptive immune response that can clear the virus-infected cells and cure chronic viral infections, such as HBV. We have also found that intra-tumor delivery of STING agonists can induce the programmed cancer cell death and activate anti-cancer immunity for sustained control of tumor growth. We plan to further optimize our lead STING agonists and refine our liver-targeted delivery vehicle to develop the STING agonists as a potential drug to cure HBV and liver cancers. Fig 2

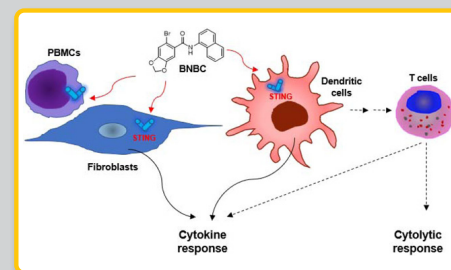


Fig 2

New Drug Targets HBsAg: To Improve Recognition of HBV by the Immune System

From the lab of T. Zhou: We have discovered a concept-proving drug (252-C4-MPI) that suppresses HBV production and appears to change its antigenic ‘face’ (HBsAg) with the expectation that it will cause virus recognition by the immune system. An important new strategy is to find a drug that can selectively modify the HBV proteins (or antigens) such that the virus becomes recognized and can then be eliminated by the immune system. We hope to pursue preclinical models for determining if our drug has the ability to alter the HBV’s protein (antigen) structure so that it is safely recognized and attacked by the immune system. If so, we can further develop this drug or identify other drugs that work similarly through our screening process, which could then become ‘first in class’ HBV drugs.

New Platform Technology: For the Early Detection of Liver Cancer

From the lab of A. Sayeed: We have detected a specific “mRNA” in the blood that could be used as a new early detection marker of liver cancer. The mRNA we detected is associated with cancer proteins that are not normally in the blood and could, therefore, become part of a simple blood test. People living with chronic HBV are at significant risk for dying prematurely from liver cancer. Early detection is critical to survival, but current screening methods for liver cancer are expensive, inaccurate or unreliable. Fig 3

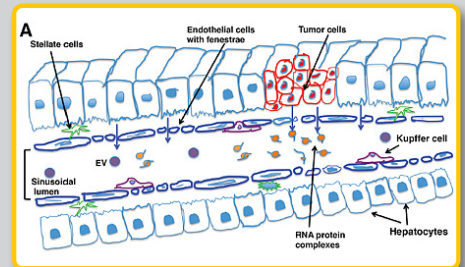


Fig 3

Precision Medicine Approaches and Treatments for Breast Cancer

From the lab of R. Pestell: We have discovered, in an animal study, that a drug used to treat HIV shows potential in treating triple-negative breast cancer, a particularly virulent type of the disease.

Our researchers identified a potential genetic target in triple-negative breast cancer called CCR5 after analyzing more than 2,200 breast cancers.

A humanized monoclonal antibody targeting CCR5 called leronlimab, which has a strong safety profile in clinical trials for HIV, has proven effective in blocking the metastatic spread of human triple-negative breast cancer in mice. Leronlimab also reduced the progression of many of the established metastases. Fig 4

“Triple-negative breast cancer often has a poor prognosis with limited treatment options—typically surgery, chemotherapy and radiation—with associated significant side-effects reducing the patients’ quality of life,” Pestell said. “The effectiveness of leronlimab in preventing metastasis and reducing the size of the metastases provides further support for carefully controlled clinical trials.”

In related precision medicine studies of breast cancer, Pestell’s laboratory revealed that cyclin D1 (thought to be a nuclear oncogene) has an additional function in the cell membrane. Cyclin D1 is overexpressed in a large proportion of human breast cancers, but targeted therapies help only a subset of patients. The studies show that cyclin D1 (which resides outside the nucleus in a membrane pool) activates another pathway to induce tumor growth called Akt.

“A detailed understanding of the molecular events by which cyclin D1 promotes tumorigenesis is essential to provide more effective and longer lasting remissions for breast cancer survivors,” Pestell said.

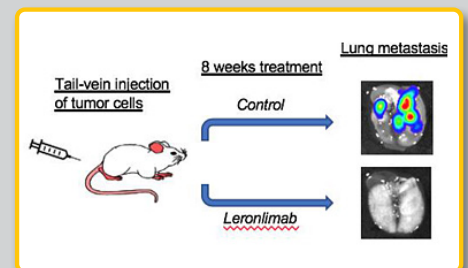


Fig 4



Blumberg Institute research
Leading the Way
to a Cure

Expanding our home and research facilities

Construction has begun on a \$20 million expansion of the nonprofit Pennsylvania Biotechnology Center (PABC).

Managed by the Baruch S. Blumberg Institute, which is the Hepatitis B Foundation's research arm, the PABC is home to both the Blumberg Institute and the Foundation. Blumberg Institute researchers are focused primarily on hepatitis B and liver cancer treatment, prevention and diagnostics.

The PABC, which is one of America's most successful life sciences incubators, will be expanded by 40%, providing new labs, office space and more. The center has nearly 80 member companies, more than half of which have operations on site.

About 400 people worked at the PABC prior to COVID-19; the expansion will mean another 100 or more jobs.

Work should be finished by October 2021. You can follow the project on the PABC website and social media. www.pabiotechbc.org



Building Programs During Challenging Times

Hepatitis B Foundation receives grant from Bristol Myers Squibb

Reducing disparities in liver cancer for high-risk minority groups in the United States is the goal

Bristol Myers Squibb has awarded a one-year grant to the Hepatitis B Foundation to close the disparity gaps related to hepatitis B-associated liver cancer in the U.S. among Asian Americans, Pacific Islanders, African immigrant communities and other high-risk groups.

Hepatitis B is the primary cause of liver cancer worldwide and more than 2 million people in the U.S. are living with chronic hepatitis B infection. Liver cancer is one of the deadliest cancers, with a five-year survival rate of less than 20%. Over the past decade, liver cancer incidence and mortality has steadily risen each year, even while rates of most other cancers have been in decline. Diagnosing hep B in its earliest stages is the key to preventing progression to liver cancer. This can be accomplished through ensuring that people with hepatitis B are diagnosed, appropriately managed, and receive ongoing liver cancer screenings.

"This is vitally important work because the communities we will be working with experience a significantly higher rate of liver cancer caused by hepatitis B, in some instances up to thirteen times higher than the general U.S. population,"

Chari Cohen, DrPH, MPH, senior vice president of the Foundation, said. "We greatly appreciate this generous grant from Bristol Myers Squibb."

The grant will fund an initiative to develop and implement a culturally appropriate, community-focused awareness and education campaign to improve knowledge about the link between hep B and liver cancer, dispel common myths and misconceptions, reduce disease-related stigma, and normalize conversation around hepatitis B and liver cancer among highly impacted communities.

Changing the perceptions of hepatitis B and liver cancer can lead to health behavior change, especially when integrated into programs that improve access to care and treatment. These efforts can lead to more high-risk people in target communities seeking out and receiving liver cancer screening, thus diagnosing liver cancer at earlier stages, when it is still treatable.

Training the hepatitis B leaders of tomorrow

Educational programs continued through the Blumberg Institute, despite the pandemic, in 2020

Seven Post-doctoral Fellows from universities worldwide, **six Junior Research Fellows** (recent college graduates) and **eight college undergraduate students** worked research in Blumberg labs. Also, **seven students** from Xavier Medical School conducted research rotations in Blumberg's operation at the Lankenau Institute for Medical Research.

Advanced placement chemistry students from the Central Bucks School District returned to our campus late in the year for regular classes and lab work. Those outstanding scholars, 28 last year, continue to win awards and scholarships. **Rishi Vaidyanath**, a CB East senior, last summer won a Gold Medal at the Delaware Valley Science Fair, qualifying him for international competition.

The summer science enrichment program continued in a hybrid approach, with experiment kits being shipped to students to facilitate work at home, along with online learning. The Blumberg team, led by **John Kulp, PhD**, director of academic affairs, delivered two sessions of the innovative program to **15 high school students**.



▲ Baruch S. Blumberg Institute students

Hepatitis B Foundation co-founders chosen for major new award from the American Association for the Study of Liver Diseases (AASLD)

Hepatitis B Foundation co-founders Joan Block, RN, BSN and Timothy M. Block, PhD, received a very significant honor on Nov. 14 during the annual meeting of the AASLD

AASLD is the leading organization of scientists and health care professionals committed to preventing and curing liver disease.

The Blocks received the AASLD's inaugural Distinguished Advocacy Service Award, which "recognizes service provided to the hepatology community over an extended period that raises awareness or garners public and federal legislative support and promotes liver health and quality patient care."

The award was presented by **T. Jake Liang, MD**, Director, Chief, Liver Diseases Branch, National Institute of Diabetes, Digestive and Kidney Diseases and former President, AASLD.

"The Hepatitis B Foundation has grown from a one-person crusade to a well-funded multi-tier organization with a large staff and deep influence in the advocacy community," Dr. Liang wrote in his nominating letter. "The Foundation has effectively represented and advocated for patients with chronic hepatitis B and raised prominent awareness of the disease by implementing innovative educational, patient-oriented, community-based and public health programs."

"The Foundation has effectively represented and advocated for patients with chronic hepatitis B and raised prominent awareness of the disease by implementing innovative educational, patient-oriented, community-based and public health programs."

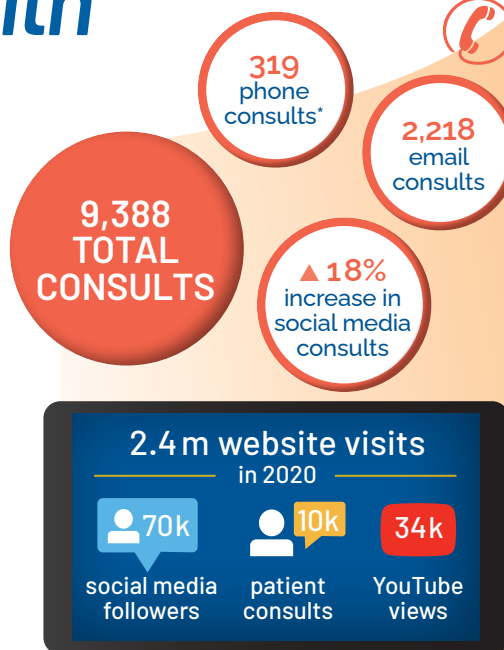
T. JAKE LIANG, MD



▲ Timothy M. Block, PhD and Joan Block, RN, BSN were honored to receive the AASLD Distinguished Advocacy Service Award

Outreach and Patient Education Leading the Way to Better Health

Hepatitis B can be an overwhelming and confusing diagnosis. Our trained staff answer questions about test results, transmission, vaccinations, and care, and help patients to understand what their diagnosis means for their health and their future. We guide people with hepatitis B as they face their diagnosis and provide guidance for telling loved ones, finding care, starting a family, and hope for a bright future ahead.



*Phone consult callers were mostly patients (61%). Of those we had information on, 47% were age 19-34.

Callers were from 27 states (plus D.C.) and 11 countries. Most common call topics were test results, vaccine, transmission, newly diagnosed, medication access help, finding a doctor, possible exposure, and treatment options.

We saw a significant drop in consult requests in April, May and June, with rebound beginning in July and continuing to rise or hold steady each month. We are seeing an increase in consult requests specifically about COVID-19 – focusing on outcomes in people who have HBV, and safety/efficacy of vaccine.

#justB national storytelling campaign shines a spotlight on hepatitis B

Our #justB national storytelling campaign features real people sharing their stories about hepatitis B to increase public awareness, decrease stigma and discrimination, and to promote testing and treatment, which will ultimately save lives.

Forty storytellers share their experiences with hepatitis B and liver cancer both online and at in-person educational events throughout the U.S. Over 2.2 million people have viewed our stories, improving awareness around the world. **You can watch all our 19 multi-lingual #justB stories at www.hepb.org/justb.**

#justB is a national, multi-lingual, digital storytelling campaign that aims to:

- ✓ Increase **awareness** and **advocacy** around hepatitis B
- ✓ Decrease **stigma** and **discrimination** associated with the disease
- ✓ Promote **testing**, **vaccination**, **linkage to care**, and **treatment**
- ✓ **Empower** people living with hepatitis B to share their stories to help educate the public and inspire action

#justB
Everyone has a story.





Public Health Leading the Way to Eliminating Hepatitis

To bring hepatitis B to the forefront, we must be aggressive in our efforts to test, vaccinate, treat, and prevent spread. But we can't stop there. We will continue to build new coalitions and support existing efforts to ensure that every infected person knows their status and has access to care that can save his or her life.

Going global with the *B the Voice* Story Bank

Building on the great success of the #justB storytelling campaign, we've launched our new, international "B the Voice" Story Bank.

This initiative will document and share the impact that hepatitis B has on individuals, families and communities around the world by curating their unique stories.

"Centering the voices of people living with hepatitis B is critical to raising awareness, combatting stigma and discrimination, as well as encouraging more people to speak out or take action in other ways," **Rhea Racho, MPAff**, the Hepatitis B Foundation's public policy and program manager, said. "That's true whether it means getting tested for hepatitis B, talking to a doctor, educating family or community members about prevention or advocating for resources and policies to support countrywide hepatitis B elimination."

The international *B the Voice* Story Bank got off to a fast start. By year's end, more than 16 people from at least 10 countries have submitted stories for the new program. Ultimately, we would like to have people sharing their hepatitis B stories in even more countries around the world. People living with hep B are invited to share their stories by filling out the story collection form on our website www.surveymonkey.com/r/bthevoice.



Hep B United is the largest collaborative voice representing hepatitis B professionals, advocates and patients in the U.S. Together, we serve as a driving force to ensure that we make national, regional and local progress towards hepatitis B elimination.

Since its establishment in 2011, the Hep B United national coalition has more than doubled its community network. HBU is currently comprised of over 49 organizations and local hepatitis B coalitions in 29 cities, 23 states, and the District of Columbia. Through our national network of coalition partners, Hep B United has a reach of over 6 million people and more than 500 public health professionals.





Hep B United impact

In 2020, the COVID-19 pandemic presented unique challenges that impacted community-based hepatitis B prevention and treatment programs.

Hep B United provided a space for partners to share local experiences, discuss barriers, and develop innovative strategies to continue critical hepatitis B outreach, education, and screening efforts among communities at high risk for infection. Hep B United's 2019-2020 mini-grant program participants, whose projects were impacted by the pandemic, readjusted strategies and creatively achieved their goals and objectives. You can find the report at www.hepbunited.org.

Hep B United hosted its Eighth Annual (and first virtual) Summit on Dec. 2-4, with participation from over 220 individuals from around the U.S.

The Summit's theme was "Standing Up for Hepatitis B: Creative Collaboration to Amplify Awareness, Access, and Equity." Sessions included innovative local, national, and global programs to prevent, diagnose, and treat hepatitis B, implementing screening and vaccination programs during the COVID-19 global pandemic, patient engagement, and voices from the #justB program. During the summit's reception on Dec. 4, Hep B United presented the first Hepatitis B Federal Champion Award to Corinna Dan, RN, MPH, former senior policy advisor, U.S. Department of Health and Human Services Office on Infectious Disease and HIV/AIDS Policy. Hep B United also presented 2020 Hep B Champion Awards to nine community leaders and organizations in recognition of their collaborative and successful initiatives to address hepatitis B. The report is on our website.

Hep B United partners continue to have a far-reaching impact in increasing hep B education, screening, and linkage to care. A recent survey of 13 coalition partners on activities conducted between 2017 and 2019 showed that Hep B United partners **hosted over 400 screening events and tested over 13,800 people for hepatitis B infection.** Additionally, partners conducted outreach and **provided hepatitis B education to nearly 20,000 people.** Hep B United **reached over 70 communities** including populations from Asian America, Pacific Islander, African and Latinx communities.



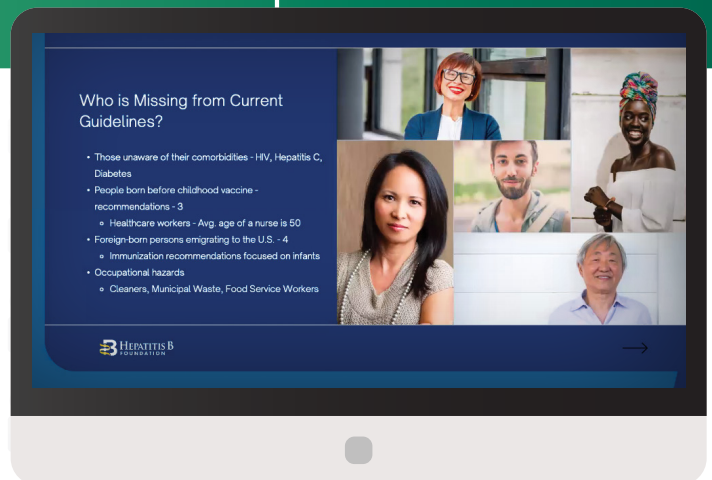
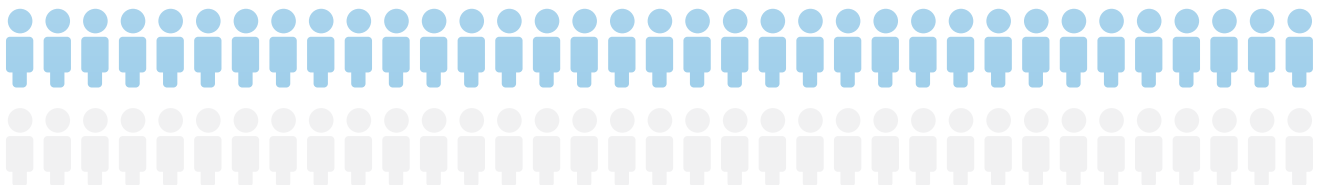
THIS YEAR MORE THAN 220 PEOPLE ATTENDED, DESPITE THE VIRTUAL NATURE OF THE EVENT.

The most attended sessions were "Integrating HBV into state elimination planning," "What happened to the cure for HBV?" "Expanding Hepatitis B Outreach in Non-Traditional Settings," and "Universal Adult Hepatitis B Vaccination."

**117 VISITED THE POSTER SESSION.
35 PEOPLE VISITED THE EXHIBIT HALL.**

Overall, **90-95%** of evaluation respondents stated that each session met or exceeded their expectations and would be useful in their daily work.

100% of respondents agreed that the Summit overall met their expectations and would be useful in their daily work, and **100%** stated that they would recommend the Summit to colleagues.



Who is Missing from Current Guidelines?

- Those unaware of their comorbidities - HIV, Hepatitis C, Diabetes
- People born before childhood vaccine - recommendations - 3
 - Healthcare workers - Avg. age of a nurse is 50
- Foreign-born persons emigrating to the U.S. - 4
 - Immunization recommendations focused on infants
- Occupational hazards
 - Cleaners, Municipal Waste, Food Service Workers

HEPATITIS B FOUNDATION

Pandemic prompts Hep B United Philadelphia to pilot contactless screenings

Hep B United Philadelphia reached more than 1,500 people at risk for hepatitis B in Greater Philadelphia in 2020. In March, when in-person gatherings, including health fairs and community outreach events, were canceled due to the COVID-19 pandemic, Hep B United Philadelphia pivoted to provide “contactless screening” for hepatitis B. The concept entails referring people at risk directly to the laboratory for free hepatitis B testing. So far, 48 high-risk adults have signed up to participate in screening, 22 individuals have completed screening for hep B and, of those screened, we identified six positive hepatitis B infections and three individuals in need of additional vaccination. All of those people were linked to care.

One aspect of this program includes promotion of hepatitis B awareness and screening through WeChat groups. The Foundation is working with Medical Mandarin students at Penn and Penn Medicine APAMSA students to share information on hep B through WeChat, a popular social media platform. We will continue promoting the contactless screening program in Philadelphia as an additional resource for the community beyond the pandemic.

We also have transitioned our activities online and created a hepatitis B community presentation that describes the importance of screening for hep B in Mandarin, Vietnamese and English. Additional hep B specific resources were created through a grant received from the National Network for the Library of Medicine in Vietnamese, Khmer, Indonesian, and Chinese. Additionally, we have continued expanding outreach through partners who provide direct services to people who inject drugs or have a history of injection drug use. We hosted a virtual health fair in August for community partners in Philadelphia to share resources particularly during the challenging COVID-19 pandemic.

Much of our work on addressing hep B in Philadelphia and beyond was published in 2020, marking another impactful year for public health research for Hep B United Philadelphia.

Coalition Against Hepatitis in People of African Origin

The Foundation leads the national Coalition Against Hepatitis for People of African Origin (CHIPO), which is working to address the high rates of hepatitis B infection among African immigrant communities in the U.S.

CHIPO serves as a forum for sharing information and best practices, and improving national capacity to improve hep B awareness, testing, vaccination and treatment among highly affected African communities.

Working with CHIPO partners, we are developing and testing new culturally and linguistically appropriate strategies for improving awareness, screening, and care for both hep B and liver cancer among U.S. immigrants from Africa. We completed a three-year project to provide a train-the-trainer toolkit for health educators and simple flip charts that educators can use to improve knowledge about hep B in their communities. CHIPO also is working on a similar project focused on liver cancer.

For several years, CHIPO has been involved working on federal recognition of National African Immigrant and Refugee HIV/AIDS and Hepatitis Awareness (NAIRHHA) Day, observed annually on Sept 9. Making NAIRHHA Day official would go a long way toward bringing greater awareness and resources to HIV/AIDS and viral hepatitis in African immigrant communities in the U.S., which are disproportionately impacted by these two diseases.



International reach 2020

The Hepatitis B Foundation has a global reach, working with partners towards worldwide elimination of hepatitis B. Our public health campaign in Haimen City, China continues to serve as a model for increasing awareness, testing and sustainable care in endemic populations. We are now focusing our global efforts on documenting stigma and discrimination around the world, and growing a grassroots movement to raise the voices of people living with hepatitis B that can lead to lasting policy change. Talking with people facing discrimination around the world is helping us understand the true social and professional impact. In 2020, we also collaborated with ICE-HBV and the World Hepatitis Alliance to create an educational resource for governmental leaders, to help them understand the urgent need to address hepatitis B. That tool will be available widely in multiple languages. We also disseminated results of our Patient Focused Drug Development Meeting to global groups, to encourage similar patient-focused meetings in other countries.



NEW CLINICAL TRIAL DIRECTORY

The Foundation created a new Clinical Trial Directory with partner Antidote. People around the world can now find information on hepatitis B, hepatitis D and liver cancer clinical trials near them in 60 seconds or less!

Advocacy Leading the Way by Taking Action

HHS discrimination letter

Awareness and advocacy efforts guided by our team have led to renewed interest and federal action from the U.S. Department of Health and Human Services (HHS). Despite nondiscrimination policies, we regularly hear about students being denied admission to health professions schools due to their hepatitis B status. HHS issued an updated letter in November 2020 to all U.S. health profession schools to ensure their compliance with federal civil rights laws that protect individuals living with hep B from discrimination. The Hepatitis B Foundation played an integral role in a landmark settlement by the U.S. Department of Justice in 2013, which ruled that a medical school had violated the Americans with Disabilities Act (ADA) when they denied applicants because they had hepatitis B. Since 2013, we have continually brought federal attention to the issue and encouraged students to file formal complaints against discriminatory policies.

Viral hep strategic plan

Over the past two years, the Foundation provided feedback at multiple stages to assist HHS in developing the Viral Hepatitis National Strategic Plan: A Roadmap to Elimination 2021-2025, which was released early in 2021. The plan provides objectives and goals specifically to eliminate viral hepatitis in the U.S. It features comprehensive strategies aimed at preventing viral hepatitis infections, improving viral hepatitis-related health outcomes of people with hepatitis, reducing hepatitis-related disparities and health inequities, improving viral hepatitis surveillance and data usage, and achieving integrated, coordinated efforts by all partners and stakeholders that address the hepatitis epidemics. HHS' integrated, ambitious approach to eliminating viral hepatitis is a major step towards achieving health equity amongst communities that are disproportionately impacted by hepatitis B.

#HepBUnite Week of Action

For World Hepatitis Day 2020, we coordinated a virtual advocacy week from July 21-28. More than 90 advocates joined our #HepBUnite Week of Action Kick-off Call, which included inspiring remarks from hep B champions U.S. Rep. Grace Meng (NY) and Judy Chu (CA), an overview of Hep B United's federal advocacy priorities, and a call to action to raise awareness and support around hep B prevention, surveillance and research to find a cure. Advocates from around the country sent a total of 118 messages to their Members of Congress, reminding them of the importance of continued funding and support for hepatitis B services and programs during the COVID-19 pandemic and beyond.



Drug tiering update

The Hepatitis B Foundation released a new report last October, "Health Insurance Costs Impacting Shoppers Living with Hepatitis B" (posted on our website), to help people living with hepatitis B and their caregivers make better-informed decisions when choosing health insurance plans. In recent years, we have received a growing number of messages through the patient-consult line expressing concerns about paying for their life-saving treatments due to a lack of affordable options. Our analysis of over 280 plans in 14 states sold on the health insurance marketplace in 2019 and 2020 found that health insurance companies implemented benefit plan designs that force people living with preexisting conditions such as chronic hepatitis B to bear the burden of their treatment costs. Such practices are prohibited under the Affordable Care Act, or the ACA. The report is a resource for consumers to examine which health insurance companies and plans may be engaged in discriminatory practices and to learn about trends and practices that may increase out-of-pocket costs for treatment. It also serves to bring awareness to policymakers and hepatitis B advocates to promote policy changes.

First-ever externally led Patient-Focused Drug Development meeting for hepatitis B

In cooperation with the U.S. Food and Drug Administration (FDA), the Hepatitis B Foundation hosted an externally led Patient-Focused Drug Development (PFDD) meeting focused on hepatitis B on June 9, 2020. It was the first-ever PFDD meeting dedicated to hep B.

The Foundation produced a comprehensive report on the event and posted it on our website (along with a complete transcript of the meeting, the more than 300 email comments that were submitted, and a link to the official video recording). The FDA also reviewed and posted the report on its External Resources and Information Related to Patients' Experience page. The report's availability was promoted through our newsletters and social media, plus professional publications and meetings.

The Foundation was given approval by the FDA to organize and conduct this meeting, which was an online-only event due to COVID-19, making it the first PFDD to be conducted exclusively as a webcast since the agency began holding PFDD meetings in 2012.

The four-hour meeting allowed health care providers, FDA officials and drug developers to hear directly from patients and family members, specifically regarding their experiences living with chronic hepatitis B, to better inform these and other key stakeholders about the patient perspective. By incorporating personal anecdotes and firsthand experiences, the FDA can enhance its decision-making in terms of drug development and clinical trial design with relation to hepatitis B.

The PFDD meeting focused on two formal topics:

- 1 living with chronic hepatitis B: symptoms and disease impacts
- 2 perspectives on current and future approaches to treatment

A panel of four individuals for each topic shared their opinions and experiences to begin the dialogue. An FDA facilitator led each discussion. Audience members

who were viewing the webcast also were able to participate in the discussion by sending in comments on the Foundation website or by calling in. Additionally, participants online who are living with hepatitis B, or family members of someone living with HBV, were encouraged to participate in live polling with a series of questions and to submit comments and their own questions.

More than 650 people joined the online PFDD meeting from around the globe. Foundation Senior Vice President **Chari Cohen, DrPH, MPH**, organized the meeting.

"Overall, the discussion documented the significant physical and emotional impact for people living with hepatitis B, which leads to reduced quality of life and affects family and social relationships, as well as education and careers for many people," Dr. Cohen said. "We heard directly from the people who joined us about their experiences with fatigue, shame and isolation, stigma and discrimination, and their fear of dying prematurely from liver cancer."

Participants discussed major challenges with current treatment including finding a knowledgeable clinician to manage their hep, cost of medication and the burden of taking a daily pill for many years.



Bright

a native of Ghana
now living in the U.S.:

"For me, the physical impact of living with hepatitis B has been debilitating and huge."

Patient-Focused Drug Development survey results



Almost **83%** of survey respondents were from outside the U.S.

102 countries were represented.



About **78%** of those individuals, when asked about the physical symptoms of their hepatitis B infection, said they feel tired a lot, more than people they know.



Overall, **62%** of the respondents said they feel their life is less enjoyable because of their chronic hepatitis B.



When asked about their concerns around the disease, **55%** said they worry about developing liver cancer.



48% say they fear living a shorter life.



Around **58%** said they are concerned about discrimination, such as losing a job or being denied school admission, because of their hepatitis B infection.



About **49%** of the respondents who currently are on a hepatitis B medication report that side effects are a real challenge.

PFDD participants stressed a strong desire for future treatments that will result in loss of hepatitis B surface antigen (HBsAg, the blood marker of infection) and reduced risk of liver cancer over a finite treatment period. There was strong interest in participating in future clinical trials that might lead to functional cure, as long as trials would not be too disruptive of daily lives and participants would receive adequate safety information on experimental treatments.

In addition to conducting the PFDD meeting, the Foundation collected patient experiences through an online survey and in-depth phone interviews.

More than 2,100 people from 102 countries responded to the survey (results are above), and 24 people participated in the phone interviews.

Results coincide what the Foundation team learned from the PFDD meeting and also highlighted the different experiences and challenges faced by people living in other countries.

For example, outside the U.S., more people documented experiencing stigma and discrimination, and had difficulty finding and affording care and treatment for their hepatitis B.

All of the experiences collected from the PFDD meeting, the survey and the interviews will be used by the Foundation to help advocate for the needs of people living with hepatitis B, and ensure that drug and clinical trial development take the needs and concerns of patients into account.



David

31, a Michigan resident born in South Korea:

"The possibility of transmission and fear of others' reactions to my hepatitis B is what has been the most impactful in my life."



Alice

a Hong Kong native now living in California:

"My family tends to feel shame for having a chronic illness."



Randy

whose son wanted to serve in the U.S. military but was denied due to hepatitis B:

"The disappointment is devastating, and we continually live with it."

Thank You to Our Donors



The Hepatitis B Foundation's valuable research and programs are made possible by the commitment of our donors. We are grateful to every individual and organization that has generously supported our mission to find a cure and improve the quality of life for those affected by hepatitis B.

Our Donor Honor Roll

JANUARY -
DECEMBER 2020

VISIONARY CIRCLE (\$10,000 AND ABOVE)

Anonymous (2) ●*
Timothy and Joan Block ●
The Carol and Edmund Blake Foundation ●*
CTC Foundation
The Gunst-Williams Family Fund ●*
The Kahn Charitable Foundation
Bruce and Cynthia Maryanoff
Nancy Laskin ■*
Vivek Ramaswamy ■

GLOBAL CIRCLE (\$5,000 TO \$9,999)

Anonymous ■*
Nathaniel and Bing Brown ●*
The Herman Goldman Foundation
Linda London ●
Bruce and Cynthia Maryanoff
Tulchin Family Foundation ●*
Paula Wong ■

FOUNDER'S CIRCLE (\$2,500 TO \$4,999)

Anonymous
Stanley and Gerri Broadbent
Bonnie Chang and Robert Hsu
The Faye and Mayer Krupp Family
Charitable Foundation ●*
Anthony and Jane Ford-Hutchinson
David and Cynthia Gruber ●*
Mark Petty
Joel Rosen ●

PRESIDENT'S CLUB (\$1,000 TO \$2,499)

Anonymous
Dennis and Ailee Wen
Mary Anne McDonald and Joseph Benning
Peter Block and Christina Chen
Carol Brosgart
Richard and Flo Celender
Gang Chen
Chari and Paul Cohen
Loren and Jenny Danzis
David Family Charitable Foundation
Estate of Helen Wise
Richard and Hie-Won Hann
Anne Heacock
Joseph and Maryanne Hediger ●*
Thomas Hofmann ■
Ram Kapur
Patrick Lam ●
Anh Le
Anna Lee and Arthur Brown
Judith Marchand ●
Timothy Ocain ■
Lewis and Rosebud Roberts
Jonathan and Virginia Shames
Michael and Charleen Sofia
Lishan Su and Yan Li
Walter Tsou and Jean Lee
Su Wang and Daniel Chen
Michael Wehner ■
Bing Xue and Xiaoshun Yu
Wayne and Carolyn Yetter
Tianlun and Amy Zhou ■

PATRONS (\$500 TO \$999)

Anonymous (2)
Eileen Beck
Robert Britt and Stephen Mico ●
Faith Calhoun
Daniel Chan and Shuk Fong Lau ■
Terri Chen
Danny Chen ■
Joe and Molli Conti
Mark and Laura Denison
Fatmeh Diab and Michele Nasti
Julie Gerhardt
Jean Holmes and Lisa Mathason
Joanne Jensen and Lewis Wakefield ■
Louis and Jeannie Kassa
William Laskin
Jennifer Miller
Kate Moraras
Debora Nelson ■
Lysa Nguyen ■
Pamela Norton and Joseph Potz
Yusheng Qu ■
Charles Rice
Malini Srivastava and Michael Christenson
John and Phyllis Taylor
Khai Van ■
Jeane Vidoni
Mary Yee ●
Jimmy Yeung ■
Sen Zhao

- * Deceased
- Baruch S. Blumberg Institute donations
- Hepatitis B Foundation and Baruch S. Blumberg Institute donations
- * Lankenau Institute for Medical Research donations
- * Baruch S. Blumberg Institute and Lankenau Institute for Medical Research
- * Hepatitis B Foundation and Lankenau Institute for Medical Research
- All other gifts without a symbol have been made to the Hepatitis B Foundation

FELLOWS (\$250 TO \$499)

Anonymous
 Ishola Adeyemo
 Sanjay and Amy Batra
 Kathy Beveridge
 Jinhong Chang and Biming Cao
 Justin Chin
 Grace and Sam Chiu
 Jay Cummings
 Edward and Susan Fischer
 Alan and Irma Freedman
 Robert and Eileen Frey
 Ju-Tao Guo and Juying Zhang
 Peter and Judy Hoekstra
 Maureen and Kent Kamischke
 Ufuk Karaaslan ■
 Margaret Keenan
 Amber Kirchner
 Raymond Lee and Julia Liu
 Edward Lin ■
 Yi Liu
 William Mason
 Janice Morris ■
 Kevin Naskiewicz
 Richard Pestell ●
 Bob and Jane Rafferty ■
 James Samuels-Davis ■
 Bill Sanders
 Christoph and Mirjam Seeger
 Jeanne Szyszko
 Janine Witte
 Jay and Theresa Wrobel
 Ye Yao
 Wen and Michael Yarbrough

SUPPORTERS (\$100 TO \$249)

Anonymous (2)
 Lydia Adu
 Ovidiu Aldea
 Sura Alsaffar
 Helene and Emmanuel Bachman
 Susan Bellaire and Jack Massey
 Kathryn Berger and Ann Dillon
 Peter Bernstein
 Joanne Blasenheim ■
 Susan and Greg Braithwaite ■
 Bill and Mary Cayley ■
 Joseph and Amy Chan
 Garrett Chang
 Le Chau Nguyen
 The Chiang Family Fund
 Kwok-Wai Chiu and Jen-Jong Huang
 Wendy Chuang ■
 Michele Cleary ■
 Y. Clement and Lisa Shek
 Glen Coral ■
 Ann Cunningham ■
 Mary and James Cushing Doherty
 Sheryl Dominguez
 Yanming Du and Jianghong Lei
 Kathryn and Donald Dunaway-Knight
 Vicki Dunn and Harold Shter-Dunn
 Brian Eves
 Kurt and Janet Ferguson
 Heather Fichter
 Meda Fleurimond ■
 Daniel and Jamie Fox
 Hale Freeland
 Catherine Freeland and Daniel Ventricelli
 John and Anna Fryer
 Roger and Nancy Gallic ■
 Robert Gish

Porter and Julia Gould
 Charles and Donna Grezlak
 Anya Harry
 Mark Hayden ●
 Kenny Hom and Travis Wise
 Ike and Sara Homburg
 William Hornbuckle
 Joyce Huber and Randall Ellis
 Yuko Hwang
 Randall Hyer
 Eric Jacobson
 Nicole Janssens
 Barry Kahn
 Richie Kahn and Nina Baltierra
 Jenny and Evin Kimbel
 Jennifer and Keith Kuenzli
 John and Julia Kulp
 Karen Lassman-Eul
 Huong Le
 Abraham Leibson and Sharon Victor
 Linna Lim
 Wendy Lo
 Jonathan and Shirah Lonshein
 Susana Lorenzo-Giguere
 Tony Luna
 Emily Mao McCarty
 Catherine Martin
 Jyrki Mattila
 Greg Mayes ■
 Colleen McGuigan
 Emily and Joseph Metz
 Edith Mitchell
 Catherine Morris and Richard Bader
 Richard Moyer
 Meredith and Timothy Nash ●
 Richard and Teresa O'Flynn
 Joseph Palmiotti and Penny Haff ■
 Linda Park
 Dominic Pasquarosa ■
 Janet Perper ■
 Thaddeus Pham
 Rhea Racho
 Polly Ranson
 Mike Rice ■
 Sergio Rojter
 Cristina Rolea ■
 Kenneth and Maria Rothstein
 James and Kathleen Ryan
 Jason Ryan
 John and Susan Shelly ■
 Miranda Song ■
 Kai Song ■
 Erica Spence-Umstead
 Michelle Sweeney
 Tori Szyszko
 James and Mimi Talamonti ■
 Edward Tate
 Katie Tran ■
 Gary and Ann Triozzi
 Sheri Ventricelli
 Senthil Vinayagam ■
 Tai Vo ■
 Bridget Wackerly and James Lamoreaux
 Vladimir Walko
 Shari and Steve Winkler ■
 Stephen Wong ■
 Ye Family Charitable
 Gary Young
 Laura Young
 Frank Zagarella ■
 Anthony Zamparelli
 Thomas and Amy Zipp ■

FRIENDS (UP TO \$99)

Anonymous (3)
 Joann Albert and Daniel Green
 Vasilios and Linda Alexiades ■
 John Anderson ■
 Greg Anthos ■
 Kathy Battista ■
 Audrey Beedle
 Patricia Benham and J Randall ■
 Erica Bitten ■
 Priscilla and Donald Bizer ■
 Katherine Boylan
 Raquel Braemer
 Thomas Burke ■
 Bob Cahill ■
 Valerie Cain ■
 G. Thomas Caltagirone
 Sandy Campbell
 Bob Cashman ■
 John Castro ■
 Everett and Diana Chambers ■
 Elizabeth Chan
 Pannapa Changpetch
 Jenny Chou ■
 Ralph Colucci ■
 Victor Cruz ■
 Wanda Curtis
 Carleen Dean
 Michael Delahanty
 Rebecca Devito ■
 Katie Diaz ■
 Darle Digney
 Vincent Do and Diep Do ■
 Joel Donfak
 Sandra Draus
 Phuong Du ■
 Brian Enverso ■
 Juliet Fox
 Robert Freda ■
 Brian Free ■
 Heng Fu and Amy Tseng
 Danielle Gallagher ■
 Kevin Gerzevske
 Rhonda Gilbert ■
 Trinidad Gonzales ■
 Rylan Goudreau ■
 Cam Ha ■
 Lise Halpern ■
 Ralph Harrell
 Hunt Hawkins and Elaine Smith
 Dan Hayes ■
 Arleen Henrie ■
 Xiaoling Hong and Xiao Yin
 Jessica Hoopes ■
 Michael Horn and Kim Kirchner-Horn ●
 Greg Howson ■
 Lisa Hurlbrink
 Isabella Husted
 Jessica Ishimwe
 Michaela Jackson
 Guy Jetu ■
 Malaika Joseph
 Tony Kanak ■
 Johnny Kelly ■
 Alex Koszycki ■
 Mariemel Latorre
 Kevin Lawall
 Laura Lazar
 Justin Lee
 Rachel Lefkowitz and Jay Sherwin
 John Leonard
 King and Ying Liang

Eddy Liang ■
 Evan Lord ■
 Steve Ludmerer ■
 Mary Lynn Alvarino
 Ann Mackenzie
 Kenneth Mariano
 George Mark ■
 James Massie and Janice Scott
 Douglas Mayers
 Patti McAloon
 Debbie McDowell ■
 Angela McGettigan
 Mary McMonegal
 Jacqueline Medina
 Gabriela Meller
 Jonathan Mercer ■
 Mariam Mikahel ■
 Dianna Miller
 Tracy Miller ■
 Colin Miller ■
 Loretta Molle
 Tien Nguyen
 John Nguyen ■
 Amanda Nu
 Mark and Pauline Obermann ■
 Jeanne Oesch
 Vicki and Larry Ostrom
 Mark Percy
 Elizabeth Pianalto
 Aldersen Picar ■
 Guy Pierce
 Kathleen Pierce
 Scott Pierce
 James and Diane Price
 Marguerite Quinn
 Victor and Joyce Rendano
 Shawn Riley
 Bryce Roberts ■
 Jerry Ruddle ■
 Julie Ryu
 Nick Sasomsub ●
 Carol Schramm ■
 Lori Smith ■
 Ira Spector ■
 David Sul ■
 Ray Tai
 Patrick Toner ■
 Hin Tse and Winnie Yuk Kwong ●
 Niramon Ung ■
 Pankaj Uplenchwar ■
 Sarah Uprichard
 Toan Vo
 Yichun Waltzer
 Karrie Wang
 Shawn Wang ■
 Stephanie Ward
 Rob Waring ■
 Jolene Washington
 David Welch and Jennifer Wong
 Tobi Williams ■
 Keith Willis ■
 Leslie Wu ■
 Anna and Vitali Zavyalova
 Tao Zhang

Jay and Marcia Zinger
 David Zolcer
 Eugene Zolotov

LEGACY SOCIETY (Planned Gifts)

Timothy and Joan Block
 Richard and Flo Celender
 Craig and Janet Esterly
 Richard Grillo
 Nicole Janssens
 Bruce and Cynthia Maryanoff
 Jean Miller
 Richard Moyer
 C. Theodore Tucker
 Catharine and Rob Williams
 Paul* and Janine Witte

EMPLOYEE GIVING PROGRAMS

America's Charities
 Bank of America Employee Giving Campaign
 Benevity Community Impact Fund
 Bright Funds
 JustGiving
 Kimley-Horn
 United Way of Greater Philadelphia
 and Southern New Jersey

MATCHING GIFTS PROGRAMS

American Express Company
 Employee Giving Program
 Amgen Foundation Matching Gift Program ■
 AT&T United Way Employee Giving Campaign
 Blackbaud Giving Fund
 GlaxoSmithKline Foundation
 IBM Employee Services Center
 Johnson & Johnson Family Companies
 Matching Gift Program
 JP Morgan Chase Employee Giving
 United Way Calif Capital Region
 YourCause, LLC ●

OTHER GIVING PROGRAMS

Amazon Smile Foundation
 Facebook Payments Inc.
 Network for Good

DONOR ADVISED FUNDS

The Hepatitis B Foundation and Baruch S. Blumberg Institute accept grants from Donor Advised Funds, and have received distributions from the following organizations in 2020:

Bank of America Charitable Gift Fund
 Fidelity Charitable Brokerage Services
 Schwab Charitable
 Vanguard Charitable

GRANTS AND SPONSORSHIPS

Arbutus Biopharma
 Arcinova ■
 Asian & Pacific Islander American Health Forum
 Asian Health Coalition
 Bee Bergvall & Co.
 BioAdvance ■
 Bristol-Myers Squibb
 Carta ■
 CASL

Celerion ■
 CliftonLarsonAllen LLP ●
 CME Outfitters
 Del Val Power and Light, Inc.
 Dicerna Pharmaceuticals, Inc.
 Dynavax Technologies
 EisnerAmper ●
 Enyo Pharma
 Fastsigns of Montgomeryville
 Financial Engine Corporate
 Fox Chase Cancer Center
 Fox Chase Chemical Diversity Center ●
 Fox Rothschild LLP
 Fred Beans Family of Dealerships
 Frontage Laboratories, Inc. ■
 Fulton Bank Premier Division
 Geisinger Commonwealth School of Medicine
 Gilead Sciences, Inc.
 Gilmore & Associates Inc. ●
 GlaxoSmithKline
 High Swartz LLP
 IQnection Inc
 Ivy Century Group
 Janssen Pharmaceuticals
 Keen Compressed Gas Co.
 Lyophilization Technology, Inc. ■
 Medix ■
 OrthogenRx, Inc.
 Penn Color, Inc. ●
 Penn Community Bank
 Pharmavalue Partners Inc.
 Phoenixbio
 Plasma Services Group Inc
 Poretta & Orr ■
 Riverview Bank
 Schutz Engineering Corp. ■
 Softerware Inc.
 Steven S. Cohen, Architect PC
 The Graphic Edge, Inc.
 Thomas Jefferson Medical College
 Tunnell Consulting ■
 University of Pittsburgh
 Univest Financial ●
 VBI Vaccines
 Waste Management, Inc.
 Wawa, Inc.
 Weis Markets, Inc.
 Wojdak Government Relations
 Woodmansee & Co.
 Worldwide Life Sciences ●

FEDERAL AND STATE GRANTS

Pennsylvania Department of Health
 U.S. Centers for Disease Control and Prevention
 U.S. Department of Defense
 U.S. National Institutes of Health

Thank you

**TO OUR MANY IN-KIND DONORS WHO
 ARE TOO NUMEROUS TO MENTION.**

.....

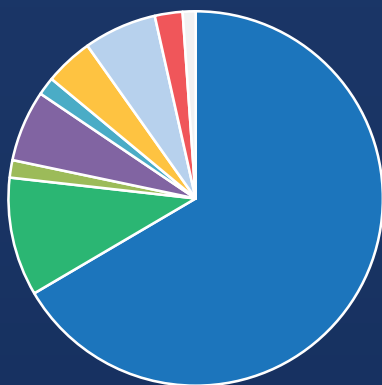
We apologize in advance for any errors or omissions in our Donor List despite our best efforts to be as accurate as possible. Please email editor@hepb.org or call (215) 489-4900 so that we can print corrections in our next newsletter. Thank you for understanding.

Year in Review

Financial Information*

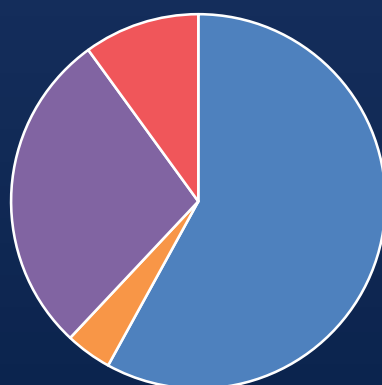
COMBINED HEPATITIS B FOUNDATION
& BARUCH S. BLUMBERG INSTITUTE¹
FOR THE FISCAL YEAR ENDED JUNE 30, 2020

Source of Funds



67%	Grants	\$5,571,617
10%	Charitable contributions***	857,591
2%	Natural Products Institute	126,186
6%	Management fees	516,000
2%	Special events	131,037
4%	Research Meeting	348,886
6%	Other Revenue	527,686
2%	Gain on Sale of Investment	200,684
1%	Investment income**	93,108
	Total Revenue	\$8,372,795

Use of Funds



58%	Research	\$5,048,443
4%	Outreach and Education****	316,049
28%	Support services	2,114,049
10%	Rent and Depreciation	860,887
	Total Expenses	\$8,693,428

* The financial information presented above does not include the activity from Hepatitis B Foundation's ownership of the net assets of the Pennsylvania Biotechnology Center. At June 30, 2019, this interest was valued at, based on the equity method of accounting, approximately \$5,148,000 per the audited Statement of Financial Position of the Hepatitis B Foundation.

** The financial information presented above excludes unrealized investment related activities.

*** Excludes in-kind donations

**** 4% reflects the combined HBF and BSBI budgets. Outreach and education comprises 12.6% of the HBF budget.

¹ **Baruch S. Blumberg Institute** is the research institute established by the Hepatitis B Foundation in 2004

The financial information in this report was prepared by management and presented in condensed form from the financial statements of the Hepatitis B Foundation and the Baruch S. Blumberg Institute audited by EisnerAmper, LLP for the year ended June 30, 2020. A copy of each financial statement is available upon request.

The Hepatitis B Foundation (HBF) was established in 1991 and remains the nation's only nonprofit organization solely dedicated to finding a cure for hepatitis B and improving the quality of life for those affected worldwide through research, education and patient advocacy. The HBF established the **Baruch S. Blumberg Institute** in 2003 as an independent, nonprofit research institute to fulfill its research mission. It was named to honor our Co-Founder Dr. Baruch S. Blumberg who won the Nobel Prize for his discovery of the hepatitis B virus.

**HEPATITIS B FOUNDATION
BOARD OF DIRECTORS
AND OFFICERS**

Chairman

Joel Rosen, Esq.

President

Timothy M. Block, PhD

Vice President

Catharine Williams, MGA

Treasurer

Joseph Hediger

Secretary

Wayne Yetter

Stanley Broadbent
Carol Brosgart, MD
Nathaniel Brown, MD
Alan Brownstein, MPH
Loren Danzis, Esq.
Craig Esterly
Anthony Ford-Hutchinson, PhD
David Gruber, CPA
Raman Kapur, MBA
Lewis Roberts, MB, ChB, PhD
Thomas Shenk, PhD
Norah Terrault, MD
Walter Tsou, MD
Su Wang, MD, MPH

Medical and Scientific Advisors

Harvey Alter, MD
Timothy M. Block, PhD
Carol Brosgart, MD
Nathaniel Brown, MD
Francis Chisari, MD
Raymond Dwek, DPhil, FRS
Anthony Ford-Hutchinson, PhD
Lawrence Friedman, MD
Don Ganem, MD
Robert Gish, MD
Hie-Won L. Hann, MD
Stephen Locarnini, MD, PhD
Anna Lok, MD
William Mason, PhD
Brian McMahon, MD
Edith Mitchell, MD
Robert P. Perillo, MD, FAASLD
Lewis Roberts, MB, ChB, PhD
Kenneth Rothstein, MD
Raymond Schinazi, PhD
Thomas Shenk, PhD
John Tavis, PhD
Norah Terrault, MD

President Emeriti

Joan M. Block, RN, BSN
Janine Witte

In Memoriam:
Baruch S. Blumberg, MD, DPhil
Nobel Laureate
W. Thomas London, MD
Bud Tennant, DVM

EXECUTIVE MANAGEMENT

President

Timothy M. Block, PhD

**Executive Vice President/
Chief Operating Officer**

Louis P. Kassa, III, MPA

Senior Vice President

Chari Cohen, DrPH, MPH

Vice President, Research

Ju-Tao Guo, MD

**Vice President, Institutional
Advancement**

Jean Holmes, MBA

Medical Director

Robert Gish, MD

STAFF

**Public Health, Outreach,
Institutional Advancement**

Leigha Adduci Getty
Catherine Freeland, MPH
Maureen Kamischke
Yasmin Ibrahim, MD, PhD, MBA
Michaela Jackson, MS, MPH
Susanna McGrogan
Kate Moraras, MPH
Megan Pierce
Rhea Racho, MPAff
Edward Tate, MS
Evangeline Wang
Beatrice Zovich, MPH

Finance and Operations

Debbie Blough
Mark Hansen
Konrad Kroszner
Judith Marchand
Patti McAloon, MBA
Dianna Miller
Loretta Molle
Ray Savage
Tammy Spruill
Nancy Young

Managing Editor

Edward Tate
edward.tate@hepb.org

**HEPATITIS B FOUNDATION
AND BARUCH S. BLUMBERG
INSTITUTE FACULTY**

Timothy M. Block, PhD
Jinhong Chang, MD, PhD
Jason Clement, PhD
Chari Cohen, DrPh, MPH
Yanming Du, PhD
Catherine Freeland, MPH
Ju-Tao Guo, MD
Xuanmao Jiao, PhD
John Kulp, PhD
Patrick Lam, PhD
Zhiping Li, PhD
Bruce Maryanoff, PhD
Sung Park, PhD
Richard Pestell, MBA, MD, PhD
Aejaz Sayeed, PhD
Kunwar Shailubhai, PhD, MBA
Ying-Hsiu Su, PhD
Roshan Thapa, MD
Matthew Todd, PhD
Tianlun Zhou, MD, PhD, MPH

Teaching and Lab Faculty

Sahithi Pamarthy, PhD
Darl Swartz, PhD
Wei Xie, PhD
Fanny Zhang, PhD

Adjunct Faculty

Gang Chen, MD, PhD
Andrea Cuconati, PhD
Doan Dao, MD, PhD
Richard Davidson, PhD
Alison Evans, ScD
Dennis Gross, PhD, MBA
Nikhil Heble, JD, PharmD
David Horn, MD
William Kinney, PhD
Cynthia Maryanoff, PhD
Nicholas Meanwell, PhD
Christopher Moore, PhD
Raj Patil, PhD
Patrick Romano, PhD
Michael Sofia, PhD

**BARUCH S. BLUMBERG INSTITUTE
BOARD OF DIRECTORS
AND OFFICERS**

Chairman

Wayne Yetter

President

Timothy M. Block, PhD

Treasurer

Joseph Hediger

Secretary

Louis P. Kassa, MPA (non-voting)

Loren Danzis, Esq.

Joel Rosen, Esq.

Thomas Shenk, PhD

Michael Sofia, PhD (non-voting)

 /hepbfoundation

 @hepbfoundation

 hepb.org/blog

 /hepbfoundation

 @hepbfoundation