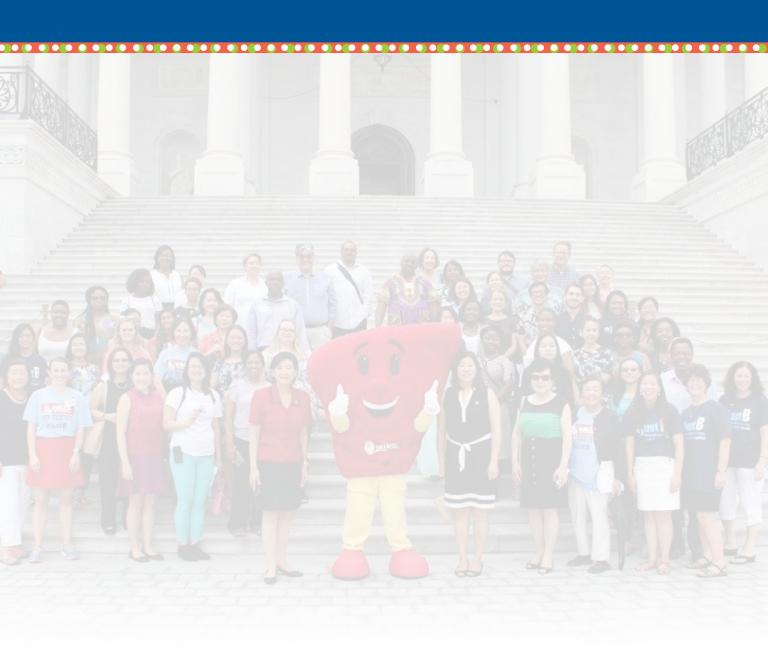




2017 Annual Report



Dear Friends,

The World Health Organization (WHO) and the U.S. National Academies of Science, Engineering, and Medicine have declared that elimination of hepatitis B from the human population is possible, and have set a target date of 2030! As the nation's leading voice for the prevention and cure of hepatitis for more than 27 years, we are thrilled that WHO has made hepatitis B a priority and proud to have played a role in the advocacy that helped achieve this. As the WHO report recognizes, elimination of

elimination of hepatitis B from the human population is possible

hepatitis B by 2030 will require an aggressive outreach campaign and effective treatment. The **Hepatitis B Foundation (HBF)** and its **Baruch S. Blumberg Institute (Blumberg Institute)** are deeply involved in both the outreach and research that is necessary to achieve the WHO goals.

In 2017, we organized 37 hepatitis B and liver cancer research thought leaders to draft a "Roadmap for a Cure," published in *Hepatology* and *Antiviral Research*, and released to the US National Institutes of Health. These leaders agreed that the technology and time is right for transformational cure research to be successful. The Blumberg Institute and its scientists are here to help make those expectations a reality, and this report shows how effective we have been.

There are still more than 292 million people living with chronic hepatitis B worldwide, with as many as 2 million in the US alone. As few as 10% of those affected worldwide are aware of their condition. For the WHO goal to be achieved, effective care must be available, and people must know they need the care. The Hepatitis B Foundation is here for just that reason. We remain the leading source of information and resources for those affected by hepatitis B.

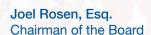
In 2017, we launched our #justB storytelling campaign, designed to give a louder voice to this silent epidemic—using real stories to bring hepatitis B into the spotlight to elevate awareness, reduce stigma, increase testing, and put a human face on this deadly disease. Excerpts from several of our #justB stories are included in this report.

Our plan also includes continuing and expanding our existing programs to emphasize prevention, promote vaccination, and provide assistance for those managing the disease. Through our *Hep B United* program, we have set the standard for building coalitions within at-risk communities to bring awareness, testing, and connection to medical care. And we continue to provide information and guidance directly to thousands of people who contact our helpline each year.

What we do is possible because of support from people like you, who have supported us throughout the years. So, thank you for your continued support, which brings us closer to a world without hepatitis B!

Sincerely,

Timothy M. Block, PhD
President and Co-Founder









The Hepatitis B Foundation and its Baruch S. Blumberg Institute are the nation's leading nonprofit disease advocacy and research organizations dedicated to finding a cure and improving the quality of life for those affected by hepatitis B worldwide. The Hepatitis B Foundation was founded in 1991 and established the Blumberg Institute in 2003 to fulfill its research mission.

Our Research Accelerates Discoveries

In 2003, the *Hepatitis B Foundation* (*HBF*) established the *Baruch S. Blumberg Institute* to accelerate the pace of research for a cure. Today our dream of discovering a curative therapeutic for hepatitis B, and seeing it in use to help people, is well on track!

Our goal is to hand off discoveries for human development within a three-year time frame. There are now ongoing clinical trials for drugs and biomarkers we helped discover. These are huge milestones, since our hope is that these drugs will contribute centrally to the management and cure for hepatitis B. Our model in which a nonprofit research institute accelerates translation of its discoveries into human use is working!

We expect more of our discoveries, and discoveries that we inspire, to reach human trials soon. Our successes from the past year are highlighted in this report.

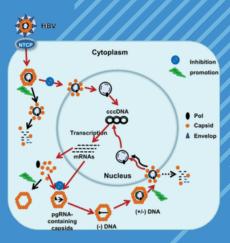


Fig.1 From F. Guo et al (2017) HBV core protein allosteric modulators differentially alter cccDNA biosynthesis.

New Strategies to Treat Chronic Hepatitis B

Human trials for capsid inhibitor

The lab of Ju-Tao Guo, MD, W. Thomas London Distinguished Professor, has identified several HBV antivirals that have unique mechanisms. One of them, a "capsid inhibitor," has completed phase I safety trials, and is expected to enter the next phase in 2018. This is licensed to Arbutus BioPharma, which is the trial sponsor. Dr. Guo has been studying the compound's mechanism of activity in detail (Guo, F, 2017; Wu et al, 2017) (**Fig.1**). He is also exploring new targets and details about the molecular biology of HBV. For example, his lab has shown that HBV cccDNA synthesis has been shown to depend upon cellular repair enzymes (Cui 2016, Qi 2016).

Unique HBV antiviral target

Another compound that causes the selective destruction of HBV RNA in the infected cell is being studied by Blumberg scientists, led by **Tianlun Zhou**, **MD**, **PhD**, **MPH**. Dr. Zhou has been characterizing the compound's unusual mechanism of action. The mechanism appears to be a first for HBV, and has enormous therapeutic potential. Most exciting is that compounds of this class could be **in human trials within the next 12 months**.

Immune stimulation

The lab of **Jinhong Chang**, **MD**, **PhD**, working with **Prof. J. T. Guo**, has developed new antiviral assay systems. Dr. Chang and colleagues identified first-in-class 'agonists' of stimulator of interferon genes (*see Guo*, 2015; *Chang*, 2015; *Zhang* 2016). They are also working with new faculty member, **Roshan Thapa**, **MD**, an expert in cancer death pathways, to understand if and how "death" signals are activated by STING agonists. This is intended to be a way of activating the body's own self defense systems to repress the virus. It also has potential as a cancer therapeutic.

Detecting Cancer Early

Early Detection Biomarkers is exciting work being conducted by our Translational Medical Research and Cancer Biomarker Discovery group. They have focused on identification and development of liver cancer biomarkers to assist early detection and guide therapies.



It's in the proteins

Based on our collaboration with **Anand Mehta**, **DPhil**, now at Medical U. of South Carolina, one liver cancer biomarker, GOLPH 2 (GP73), has been studied in thousands of people, resulting in more than 150 publications from many institutions. When used with other markers, in an algorithmic value, these biomarkers provide a very compelling non-invasive system to detect liver cancer early (*Wang 2017*).



It's in the DNA

Blumberg scientist **Ying-Hsiu Su, PhD,** took a genetic approach and determined that human urine contains small DNA fragments from the blood that come from virtually every organ. She has collaborated with our industrial partner, JBS Science Inc, to develop a panel of tests to detect specific cancer associated mutations in DNA isolated from human urine, allowing for non-invasive detection of colorectal cancer, polyps, and of course, liver cancer.



It's in the blood

Blumberg scientist **Aejaz Sayeed**, **PhD**, is studying if and how liver cancer cells spill their "mRNA" into the blood stream. The hope is that this will lead to new cancer treatments, and new biomarkers to detect cancer early.



Discovering drugs that inhibit pathogens other than HBV

The Blumberg Institute research accomplishments transcend hepatitis B and liver cancer. Some of the assays we design, and consequently drugs we find, have activity against other viruses. One important parallel line of work involves development of drugs active against hemorrhagic and other hepatitis fever viruses of public health concern.

This year, **Dr. Jinhong Chang's** lab, working closely with Medicinal Chemistry Director, **Yanming Du**, **PhD**, reported new Yellow Fever virus and Ebola virus active drugs, with efficacy alone and in combination, in animal studies, carried out with collaborators at the NIH and USAMRIID (*Ma*, 2017) (**Fig.2**).

Natural products

This group searches for new drugs using our natural products collection, led by Matt Todd, PhD, with Jason Clement, PhD and Sung Park, PhD. Working with colleagues from Virginia Technology University and University of Georgia, they identified compounds with anti-malarial activity (*Presley et al*, 2017) isolated from a K. spinosia plant. They also reported compounds isolated from plants from Australia and Indonesia (*Clement et al*, 2017).

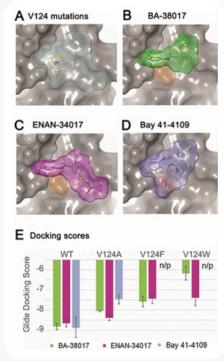


Fig.2 Courtesy: J Kulp, Blumberg Institute

Understanding and Treating Cancer

Richard Pestell, MD, PhD, world renowned cancer biologist, recently joined our faculty and has invigorated our cancer therapeutics and biology programs, establishing the Blumberg Institute's Pennsylvania Center for Cancer and Regenerative Medicine. He and his colleagues Xuanmao Jiao, PhD, Gabriele DiSante, PhD, and Agnese DiRocco, PhD have expressed provocative theories and ground-breaking observations. They recently reported that the co-receptor for HIV is found on a small population of cells within human breast cancers and provided experimental evidence, in tissue cultures, that breast cancer might be treatable with existing medicines that block the HIV co-receptor and dramatically enhance the killing by chemotherapy or radiation (*Jiao*, 2018).

Liver cancer drug update

Blumberg Institute professors Yanming Du, PhD, and John Kulp, PhD, collaborated with doctors from Mt. Sinai Hospital in New York and found that the aminothiozole compound, found to be highly selective against liver cancer cells in our labs, retained excellent activity against primary liver cancers taken right out of patients. This is very encouraging and future study of these compounds is underway.



Baruch S. Blumberg Prize

Professor Mario Rizzetto, MD (*second from left*), was awarded the 2017 *Baruch S. Blumberg Prize* in recognition of his important contributions to the understanding of the hepatitis delta virus. **Dr. Tom London** (*left*), **Dr. Tim Block**, and **Mrs. Jean Blumberg** presented the award at the annual HBF Crystal Ball Gala.



2017 Bruce Witte Distinguished Lecturer

James Ou, PhD, professor of Molecular Microbiology & Immunology, Keck School of Medicine, University of Southern California (*center*) delivered the HBF's 2017 Bruce Witte Distinguished Lecture on the role of the immune system in hepatitis B infection in April 2017. This named lecture was established by Paul and Janine Witte, HBF co-founders.

LISTENING TO OTHERS

more than 30 seminars

by leading scientists in 2017

REPORTING WHAT WE FIND

Blumberg Institute and HBF professionals published MOTE than 40 Scholarly articles



Educational Research Programs

Our mission includes training the next generation of scientists, and our academic environment is thriving. We support students at all levels of learning: high school, college, post-baccalaureate, graduate and medical school. post-doctoral and established professional scientists.





Philadelphia International Exchange Program (above)

partnered with the Blumberg Institute to provide a summer internship experience for nine high school students from China in our research labs.

High School Program (top) – Twenty students from regional high schools participated in our highly competitive summer and after-school research programs in 2017. Since we began the program in 2001, over 130 students have benefitted from our unique hands-on research internships.

Graduate Program – Geisinger Commonwealth School of Medicine, and the HBF's Blumberg Institute, began a jointly-offered Master of Biomedical Sciences (MBS) degree at our research center in Doylestown, PA. The first class of 13 students graduated from the program in August 2017.

International HBV Meeting in Washington, DC

The 32nd Annual International HBV Meeting, coordinated by the Hepatitis B Foundation, was held September 2017 in Washington, DC. More than 550 scientists from around the world gathered for four days of presentations by leaders in the field and poster sessions featuring unpublished research findings. The meeting opened with a satellite symposium focused on potential new hepatitis B drug therapies.

LEADING IN THE FIELD

HBV meeting hosted more than 550

from around the world in 2017

Francis Chisari, MD, of the Scripps Institute, was the recipient of the meeting's inaugural "Distinguished Award in Hepatitis B Research." Meeting co-chairs **Anna Kramvis**, **PhD**, University of Witwatersrand, South Africa, and T. Jake Liang, PhD, NIH, USA, presented the award to Dr. Chisari for his research on the immunovirology of chronic hepatitis B and C.



2017 HBV Meeting co-chairs, Drs. Kramvis and Liang



Thousands of new cases of hepatitis B are diagnosed each year, and we are here to provide valuable information and support to people living with hepatitis B worldwide. Our counselors answer questions about test results, transmission, vaccination and treatment. We are also working to raise public awareness and decrease stigma surrounding hepatitis B.

Help for People with Hepatitis B in 2017









Connecting Patients with our Programs

In addition to hepatitis B outreach, we also offer programs to provide support and information for conditions that impact people with hepatitis B. **Hepatitis Delta Connect** aims to increase awareness and education about this deadliest form of viral hepatitis, which only infects those with hepatitis B. Our dedicated website, social media channels, and webinars feature information and support for patients, families and providers to improve testing, management and treatment for hepatitis delta. Visit www.hepDconnect.org.

Our **Liver Cancer Connect** program works to educate those at risk for liver cancer and provides support through its email helpline and social media channels for patients and families. Visit www.livercancerconnect.org.

We Have a New look!



In June, the Hepatitis B Foundation launched a new logo reflecting the growth of our organization. The new

logo incorporates a bold letter "B" which is repeated in new logos for the Blumberg Institute and the PA Biotechnology Center, to demonstrate the relationship between all three organizations.



#justB National Storytelling Campaign Raises Public Awareness

There is no better way to raise public understanding about the true impact of hepatitis B than through personal stories. In 2017, the Hepatitis B Foundation unveiled its #justB national storytelling campaign with real people sharing their stories about hepatitis B. This national storybank is designed to put a human face on hepatitis B in order to increase public awareness, decrease stigma and discrimination, and to promote testing and treatment, which will ultimately save lives.

Over 20 individuals from across the U.S. have been featured in storytelling videos, sharing their experiences about being diagnosed with hepatitis B and the struggle to receive adequate treatment, the stigma and discrimination they face, and their courage in living with this chronic liver disease. Family members also share the pain of caring for and losing loved ones due to hepatitis B. Each story is a powerful reflection of the enormous impact that hepatitis B has on the lives of hundreds of millions people around the world. You can watch all our #justB stories at www.hepb.org/justb.





Jason #justB Aware

One day, from a routine medical examination, I discovered the devastating news: I have hepatitis B. At the time my life was unbalanced due to misgivings with addiction, leaving me lost, spiritually bankrupt, confused. I started signing up with every research study I could find, as far away as Oklahoma and Texas. I thought there was no hope. Finally I found a hepatologist 290 miles away in Louis. He let me know right there everything was going to be all right; new medicines are coming down the pipeline in a few years. He enrolled me into his cohort study to monitor what makes hep b better or worse. He made me feel like I mattered. So today I educate high school students about hepatitis B as well as HIV. Let me tell you something hep B: I have you; you don't have me.



John #justB Positive

"We've done some blood work, and you tested positive for hepatitis B." Just like that my life changed. I knew I had to prove to myself that I could be bigger than my diagnosis. I wrote to the Hepatitis B Foundation about organizing a charity bike ride to raise awareness and funding for research. What we were doing was so much bigger than us. People I didn't even know called me. An elderly woman who was living with the disease, a father with a teenage daughter who was recently diagnosed. They told me how good it felt to know I was doing this, to know that there was hope for those living with hepatitis B.





Kenson #justB There for Others

I didn't know for so many years that I even had hepatitis B, and I never had access to healthcare and treatment. That's when the thought came: Maybe this is the time for me to do something about this. I decided to teach my community about the disease to save lives. I wanted my community to break the taboo, so we can freely talk about it, especially because there are resources out there to help you live a long, healthy life. My wife and I now talk to our communities about hepatitis B. Together, we are working to save the younger generation.



Maureen #justB Brave

15 years ago I adopted a beautiful Chinese baby who was hepatitis B positive. Although my daughter's initial medical records indicated she was healthy, I was told when I arrived in China that a blood test the day before had indicated she was hepatitis B positive. I cavalierly said, "Well, that's ok, it's a virus—she'll get better, right?" I had so much to learn. One of the things I learned, however, was that managing a child's hepatitis B is not lifeconsuming, especially if, as in my daughter's case, there is no observable liver damage. I adopted a second daughter a few years later, who is also hepatitis B positive. An HBV cure is important to me because it will allow my daughters to enjoy their strength and energy, free from the shadow of a chronic condition.



Our Advocacy Provides a Roadmap for a Cure

There is tremendous momentum around hepatitis B as evidenced by the global call for its elimination and increased investment in drug discovery. The US National Academies and World Health Organization have declared the elimination of hepatitis B is possible by the year 2030, and we agree! We believe that there is now a perfect storm of opportunity to leverage our scientific knowledge and advocacy to make a cure for hepatitis B a reality.



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Our Roadmap to Eliminating Hepatitis B

In 2017, the Hepatitis B Foundation issued a comprehensive research plan to find a cure for chronic hepatitis B and the diseases associated with it, including liver cancer. Based on input from a panel of experts, our "Roadmap for a Cure" identifies six of the most promising areas of research into this deadly liver disease, as well as potential funding sources. The Roadmap is the cornerstone of HBF's Hep B Cure Campaign, a national advocacy effort to sharpen the focus on finding a cure, with the goal of doubling federal research funding.

The Roadmap will serve as basis for focusing research, and drive the Foundation's upcoming advocacy efforts to ensure that there is adequate public and private sector funding support to eliminate hepatitis B by the year 2030. Our Roadmap, and the proposed budget for these priorities, calls for an additional \$232 million of NIH support

needed through the year 2023 to support the science needed to eliminate hepatitis B.

PROPOSAL FINDINGS

NIH budget needs through 2023 to support the science to eliminate hepatitis B



Congressional Briefing

The Hepatitis B Foundation officially launched its Hep B Cure Campaign and unveiled the Roadmap to a Cure at a Congressional Briefing in Washington, DC on May 24. The Briefing was hosted by the Hepatitis B Foundation in collaboration with the Congressional Hepatitis Caucus, Congressional Asian Pacific American Caucus, U.S. Senator Mazie Hirono (D-HI) and **Representative Barbara Lee** (D-CA), and with the support of the National Viral Hepatitis Roundtable (NVHR) and the Association for Asian Pacific Community Health Organizations (AAPCHO).



World Hepatitis Day

On World Hepatitis Day, July 28, we met with leaders in Washington to encourage them to take action, raise awareness and join in the quest to eliminate hepatitis B. We arranged visits with over 35 Congressional representatives to discuss increasing federal resources to address and eliminate hepatitis B. We thank our Congressional champions Senator Mazie K. Hirono, Rep. Grace Meng, Rep. Judy Chu, Rep. Brian Fitzpatrick, and Rep. Charlie Dent for their ongoing support and celebrating World Hepatitis Day with us and our mascot, O'Liver®!







Our Public Health Campaigns Empower Communities

Our many public health campaigns continue to grow at the local, national and international levels as we work to increase prevention, screening, care and treatment of hepatitis B to save lives. All of our programs are built with many partners from the community, industry, academia, and government. Together we can work towards our common goal of eliminating hepatitis B once and for all.



EXAMPLE 2 Leads National Efforts to Eliminate Hepatitis B

Established by the Hepatitis B Foundation and the Association of Asian Pacific Community Health Organizations (AAPCHO) in 2012, Hep B United has grown to include more than 30 local coalitions across 27 cities in 24 states and the District of Columbia, all with the goal of promoting hepatitis B screening, vaccination, and linkage to care. We work on the national level to support and leverage the success of local community coalitions that include health departments, healthcare providers, political leaders, students and individuals living with hepatitis B across the country.

EXPANDING EFFORTS

Hep B United has
MOTE than 30
OCAL COALITIONS
across 27 cities in
24 states and D.C.

Hep B United's 5th Annual Summit in Washington, DC

More than 80 participants attended HBU's 5th Annual Summit in Washington, DC, in July, celebrating five years as a national coalition dedicated to reducing the health disparities associated with hepatitis B.

The summit is the largest convening of hepatitis B community leaders from around the country with partners representing patient advocates, local and state health agencies, national organizations, community-based hepatitis B coalitions, and federal partners. During the summit, Hep B United and our Centers for Disease Control and Prevention (CDC) partners presented five community leaders with the 2017 Hep B Champion Awards in recognition of their collaborative and successful initiatives to address hepatitis B in their communities.



2017 honorees were (*left to right*): **Cathy Phan**, the Health Initiatives Project Manager at HOPE Clinic; **Vivian Huang, MD, MPH**, the Director of Adult Immunization and Emergency Preparedness for the New York City Department of Health and Mental Hygiene; **Hong Liu, PhD**, the Executive Director of the Midwest Asian Health Association; **Dan-Tam Phan-Hoang, MSc**, program manager of HBI-Minnesota; and **The National Task Force on Hepatitis B for AAPI**, accepted by **Amy Trang, PhD, MEd**.

Empowering Hepatitis B Patients in Haimen City, China



The Hepatitis B Foundation has completed the second phase of a comprehensive public health program in Haimen City, China, designed to empower chronically-infected individuals to better manage their disease. A Model Patient Empowerment Program for Chronic Viral Hepatitis in Haimen City, China was a two-year, collaborative effort between the Hepatitis B Foundation and Haimen City Center for Disease Control and Prevention in China. The program aimed to help patients understand the importance of regular medical check-ups and motivate them to keep scheduled appointments. In findings published in 2017, we determined that the outreach had a substantial and meaningful impact on chronically HBV-infected patients, as reflected by lifestyle changes and improvements in hepatitis B knowledge and beliefs. The HBF hopes to expand this innovative program and use it as a model for other highly impacted communities to help reduce the enormous morbidity and mortality from hepatitis B worldwide.

Our Partnership in Vietnam to End Hepatitis B



HBF continued our support of the Vietnam Viral Hepatitis Alliance (V-VHA), established and led by **Doan Dao**, **MD**, to provide hepatitis B screening and care program in Ho Chi Minh City. Programs include efforts to determine the prevalence of hepatitis B, develop a model for linkage to care, and impact national policy on prevention and protection of health care providers from viral hepatitis. V-VHA also supports a public health education and awareness program throughout Vietnam. HBF is proud to be a partner of this international effort, which involves HBF medical director **Robert Gish**, **MD**, who serves on the board of V-VHA and has been a driving force to address the problem of hepatitis B in Vietnam for almost a decade.



Bunmi #justB Open

I came to the United States when I was 18. I know that some people in Nigeria, especially in the villages, believe there is an evil force that people can use against each other, leading to illness. Stigma is everywhere, rooted in this old belief. People don't think about the facts of how the virus is transmitted – they are afraid to even touch someone who has it. In Nigeria, many people don't even want to get tested, because treatment is either not available or costs too much money. They say, "What's the point?" In the U.S., the services are here, and I want to make sure that people of African origin know there are resources. I want to end this silence.



Kim #justB Conrageous

He knew he had hepatitis B for many years before he was diagnosed with liver cancer. It's pretty common in the Asian communities, but no one talks about it. He was the same way. He never told us he had it ... maybe because he thought people would gossip and treat us differently. They would be afraid to shake his hand, share our food, or even be in the same room with him. I can understand why he was afraid to say or do anything about it. Maybe if we had resources in our language, people could be educated, and more of us would know better. And I might have been able to help my dad sooner.

Thank You to Our Donors



The Hepatitis B Foundation's valuable research and outreach programs are made possible by the commitment of donors like you. We are grateful to everyone who has generously supported our mission through individual gifts, grants, matching gift programs, in-kind donations, sponsorships, and planned giving. Thank you!

Our Donor Flonor Koll

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Hepatitis B Foundation Executive Director Retires After 25 Years of Service



Joan Block (center) with her son Peter, husband Tim, and daughter Suzanne.

Tepatitis B Foundation co-founder Joan Block, RN, BSN, retired as executive director in June 2017, after 25 years of service. Under Joan's leadership, the foundation has grown from a grassroots effort in Pennsylvania into the nation's leading nonprofit research and disease advocacy organization for hepatitis B with a global reach. Joan will continue to serve as an advocate for its mission to find a cure and make hepatitis B history.

In recognition of Joan's enormous contributions to the world of hepatitis B, the Foundation established the Joan Block Improving Lives Fund.

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(In Memoriam

Dr. W. Thomas London

PIONEERING HEPATITIS B PHYSICIAN-SCIENTIST FOUNDING HBF BOARD MEMBER, MEDICAL ADVISOR AND MENTOR EMERITUS, FOX CHASE CANCER CENTER



The Hepatitis B Foundation mourns the loss of W. Thomas London, MD, an internationally renowned physician-scientist dedicated to the study of hepatitis B, who passed away in June 2017. Dr. London was a key member of the research team that discovered the hepatitis B virus in the early 1960s, and longtime member of the Board of the Hepatitis B Foundation and its research arm, the Baruch S. Blumberg Institute, where he also served as a distinguished scientific and medical advisor. Dr. London devoted his entire career to research on the etiology, pathogenesis, and prevention of primary liver cancer (or hepatocellular carcinoma, HCC) with particular emphasis on the epidemiology of chronic hepatitis B infection.

Dr. London represented the very best in a doctor and scientist – sincere compassion, and successful achievement in advancing the cause and cure of hepatitis B. His wisdom and guidance will be greatly missed.

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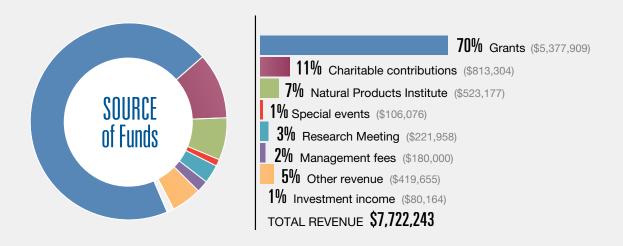
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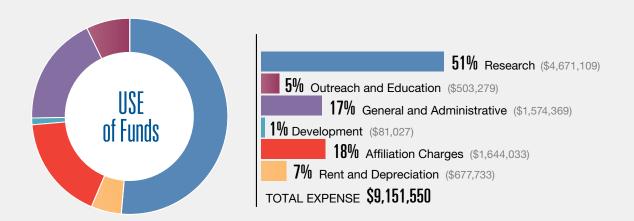
We apologize in advance for any errors or omissions in our Donor List despite our best efforts to be as accurate as possible. Please email editor@hepb.org or call (215) 489-4900 so that we can print corrections in our next newsletter. Thank you for understanding.

Year In Review + Financial Information*

COMBINED HEPATITIS B FOUNDATION & BARUCH S. BLUMBERG INSTITUTE**

FOR THE FISCAL YEAR ENDED JUNE 30, 2017





^{*}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, 2017, this interest was valued at, based on the equity method of accounting, approximately \$5,085 million per the audited Statement of Financial Position of the Hepatitis B Foundation.

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

^{***}Baruch S. Blumberg Institute is the reseach institute established by the Hepatitis B Foundation in 2003.

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, 2017. A copy of each financial statement is available upon request.

The Hepatitis B Foundation and its Baruch S. Blumberg Institute are the nation's leading nonprofit research and disease advocacy organizations dedicated to finding a cure and improving the quality of life for those affected by hepatitis B worldwide. The Hepatitis B Foundation was founded in 1991, and established the Baruch S. Blumberg Institute in 2003 to fulfill its research mission.

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