Informed
THE NEWSLETTER OF THE HEPATITIS B FOUNDATION
HepB.org
75
Fall
2020

HEPATITIS B PATIENT-FOCUSED DRUG DEVELOPMENT MEETING

In cooperation with the U.S. Food and Drug Administration (FDA), the Hepatitis B Foundation recently hosted an Externally Led Patient-Focused Drug Development (PFDD) meeting about medications for hepatitis B.

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 hosted exclusively in this format since the agency began holding PFDD meetings in 2012.

Held on June 9, the four-hour meeting allowed health care providers, FDA officials and drug developers to hear directly from patients and caregivers, specifically regarding their experiences and perspectives on 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 design with relation to hepatitis B.

The PFDD meeting focused on two formal topics: 1) Living with chronic hepatitis B: symptoms and disease impacts, and 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 was responsible for leading 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 questions and comments.

The June 9 meeting had over 650 attendees and the Foundation received over 300 email comments from around the globe. **Chari Cohen, DrPH, MPH**, the Foundation's senior vice president, organized and led the meeting.

"The discussions and comments helped to validate what we've long known to be true, that living with hepatitis B is difficult and often extremely so," Dr. Cohen said. "Better understanding the lived experiences of hepatitis B patients is critical for industry and government leaders, who will be making decisions that may genuinely improve quality of life, and even save lives."

Overall, the meeting 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. Major themes discussed were fatigue, shame and isolation, stigma and discrimination and fear of dying prematurely from liver cancer. Participants discussed major challenges with current treatment including finding a knowledgeable clinician to manage their hepatitis B, cost of medication, and the burden of taking a daily pill for many years.

PFDD participants stressed a strong desire for future treatments that will result in loss of hepatitis B surface antigen (HBsAg) and reduced risk of liver cancer over a finite treatment period.

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GOING GLOBAL with the *B the Voice Story Bank*

Building on the great success of the Hepatitis B Foundation's *#justB* storytelling campaign, this summer we launched our new, international "*B the Voice*" Story Bank.

By gathering the stories of people around the world affected by hepatitis B, this initiative will document and share the impact that hepatitis B has on individuals, families and communities. Doing so is essential, the Foundation believes, to continue the momentum toward finding a cure for hepatitis B and achieving the goal of eliminating hepatitis B worldwide by 2030.

It is critical for people living with hepatitis B worldwide to share their experiences and become part of global elimination efforts. People living with hepatitis B have the opportunity to serve as educators and advocates, helping to raise the priority of hepatitis B as an urgent public health problem. Patient stories are valuable and can help improve awareness and change policy and practice at local and national levels. Patient advocates and storytellers can lead the way leading to decreasing stigma and discrimination, and increasing care and treatment, just by sharing their stories!

"Centering the voices of people living with hepatitis B is critical to raising awareness, combating 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 goals of the campaign are to increase awareness and advocacy, decrease stigma and discrimination, and promote testing, vaccination, linkage to care and treatment to help save lives.

The international *B the Voice* Story Bank is off to a fast start. To date, 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 countries around the world.

If you are living with hepatitis B and want to share your story, please fill out our story collection form online at www.surveymonkey.com/r/bthevoice.

We already have 40 U.S.-based storytellers, who have been leading education and advocacy efforts since May 2017, when we launched our *#justB* campaign. The archive of the *#justB* campaign, which has nearly 40 first-person video segments, is hosted on the Hepatitis B Foundation's website, www.hepb.org.

JOIN THE CHAMPIONS CLUB TODAY

It's easy to become a Champion!

By joining other savvy donors in the Champions Club, you will fund hepatitis B and liver cancer research and programs throughout the year. It's easy, convenient and less stress in December! And you can cancel anytime.

Any amount helps! For just $3 per month, you can contribute to fighting hepatitis B! To become a Champion today, go to our website: **www.hepb.org/champions.**

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The Hepatitis B Foundation is a national nonprofit organization dedicated to finding a cure and improving the quality of life for those affected by hepatitis B worldwide through research, education and patient advocacy.

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The Foundation welcomes three new staffers

Ed Tate

Ed Tate came on board in spring 2020 as director of communications and marketing, leading these efforts for the Foundation, Blumberg Institute and Pennsylvania Biotechnology Center. **Tate** came to our organizations from a pharmaceutical and medical technology trade association. He previously was director of communications for Rutgers University's Office of Research and Economic Development, executive vice president of a Philadelphia-area public relations agency and media relations director for Educational Testing Service in Princeton.

Evangeline Wang and **Beatrice Zovich** recently joined the Foundation as public health program coordinators.

Evangeline Wang

Wang will be working on Philadelphia programming and outreach, helping with the Hep B United and Hep B United Philadelphia newsletters, social media messaging and state and citywide projects to address hepatitis B. She graduated last spring from Arcadia University with a bachelor's in public health and had worked as an intern at Children's Hospital of Philadelphia.

Beatrice Zovich

Zovich will be coordinating Hep Delta Connect as well as CHIPO, the Coalition Against Hepatitis for People of African Origin. She also will be working on other public health programs locally and nationally. She has an MPH from Temple University with a Global Health Certificate and has spent the last several years working in Philadelphia and New York City with marginalized communities, specifically those with people experiencing homelessness and living with serious mental health challenges.

PATIENT-FOCUSED DRUG DEVELOPMENT MEETING

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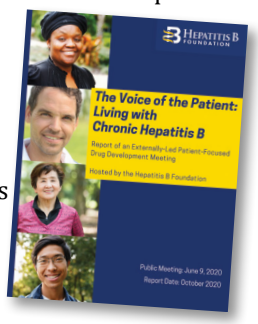
In terms of future treatment and clinical trial options, the preference was primarily for oral treatment, but injectables seemed to be acceptable for many. Most participants stated that mild, limited side effects would be acceptable. There was strong interest in participating in future clinical trials that might lead to a functional cure, as long as trials would not be too disruptive of daily lives and participants had adequate safety information on experimental treatments.

In addition to the PFDD, the Foundation collected patient experiences through an online survey and in-depth phone interviews. Almost 2,000 people from 99 countries responded to the survey, and 24 people participated in the phone interviews. The results coincide with what we learned from the PFDD meeting and also highlighted the different experiences and challenges faced by people living in different 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.

The complete report from the June 9 PFDD is available now on the Hepatitis B Foundation website and the FDA also links to the report from their website. 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.



New hepatitis delta treatment approved by European Commission

Hepcludex (formerly Myrcludex B), a new drug for hepatitis delta virus (HDV), recently was approved by the European Commission for prescription in Europe and has been launched in Germany, France and Austria.

Throughout the fall of 2020, MYR Pharmaceuticals of Germany, which now has the license for Hepcludex, will be working with the National Institute for Health and Care Excellence (NICE) in the United Kingdom to begin the process of seeking approval there. Toward the end of this year and into early 2021, the company will begin discussions with the U.S. Food and Drug Administration.

Hepcludex may help to control hepatitis delta better than interferon and it has been demonstrated in clinical trials to lower hepatitis delta virus levels and reduce liver inflammation.

For decades, hepatitis delta, the dangerous coinfection of hepatitis B, was thought to only affect about 5-10% of the estimated 300 million people worldwide with chronic hepatitis B infections. With insufficient data and funding for research related to this complicated virus, until recent years there have been limits on accurate prevalence data, effective diagnostic tools and skilled physicians to manage hepatitis B and delta coinfection.

Publications in 2019 by Miao, et al.; Chen, et al.; and Shen, et al., have helped to reveal a possibly more accurate picture of the burden of hepatitis B and hepatitis delta co-infection, providing meta-analyses that comprise data from hundreds of thousands of hepatitis B patients and the general population. While it was previously thought that 15-20 million coinfections existed globally, this new research suggests the number may be far greater, between 48-74 million. **For more, please visit the Hepatitis Delta Connect section on www.hepb.org.**

Family/Drug Name		Mechanism	Company	Website	USA Status
Interferons		Mimic naturally occurring infection-fighting immune substances produced in the body			
Intron A *(Interferon alfa-2b)*		Immunomodulator	Merck, USA	merck.com	Approved 1991
Pegasys *(PegInterferon alfa-2a)*		Immunomodulator	Genentech, USA	gene.com	Approved 2005
Nucleos(t)ide Analogues		Interfere with the viral DNA polymerase enzyme used for hepatitis B virus reproduction			
Epivir *(Lamivudine)*	*	Inhibits viral DNA polymerase	GlaxoSmithKline (GSK)	gsk.com	Approved 1998
Hepsera *(Adefovir Dipivoxil)*	*	Inhibits viral DNA polymerase	Gilead Sciences, USA	gilead.com	Approved 2002
Baraclude *(Entecavir)*	*	Inhibits viral DNA polymerase	Bristol-Myers Squibb, USA	bms.com	Approved 2005
Tyzeka *(Telbivudine)*	*	Inhibits viral DNA polymerase	Novartis, Switzerland	novartis.com	Approved 2006
Viread *(Tenofovir)*		Inhibits viral DNA polymerase	Gilead Sciences, USA	gilead.com	Approved 2008
Vemlidy *(TAF or Tenofovir Alafenamide)*		Prodrug of tenofovir	Gilead Sciences, USA	gilead.com	Approved 2016
Levovir *(Clevudine)*		Inhibits viral DNA polymerase	Bukwang, S. Korea	bukwang.co.kr	Approved 2006 in S. Korea
Besivo *(formerly ANA 380/LB80380)*		Inhibits viral DNA polymerase	Ildong Pharma, S. Korea	Ildong.com/en	Approved 2017 in S. Korea
Zadaxin		Immunomodulator	SciClone, USA	sciclone.com	Approved outside USA
ATI-2173		Inhibits HBV polymerase	Antios Therapeutics	antiostherapeutics.com	Phase I
DIRECT ACTING ANTIVIRALS		Targets the virus and interferes with specific steps in the HBV life cycle to prevent replication			
Silencing RNA's (siRNAs)		Interferes and destroys viral RNA			
VIR-2218		RNAi gene silencer	Vir Biotech, USA	vir.bio	Phase II
RG6346 *(DCR-HBVS)*		RNAi gene silencer	Roche, Switzerland	roche.com	Phase I/II
JNJ-3989 *(ARO-HBV)*		RNAi gene silencer	J&J, Arrowhead Pharmaceuticals, USA	jnj.com arrowheadpharma.com	Phase I/II
AB-729		RNAi gene silencer	Arbutus Biopharma, USA	arbutusbio.com	Phase I
BB-103		RNAi gene silencer	Benitec, Australia	benitec.com	Preclinical
Lunar-HBV		RNAi gene silencer	Arcturus, USA with Janssen	arcturusrx.com	Preclinical
Entry Inhibitors		Interferes with HBV getting into liver cells			
Hepcludex *(Bulevirtide formerly Myrcludex B)*		Entry inhibitor	Hepatera, Russia with MYR GmbH, Germany	myr-pharma.com	Phase II
Capsid Inhibitors		Interferes with the viral DNA protein shield			
Morphothiadin *(GLS4)*		Capsid inhibitor	HEC Pharma, PR China	pharm.hec.cn/en	Phase II
JNJ 56136379		Capsid inhibitor	Janssen, Ireland	janssen.com	Phase II
ABI-H0731		Capsid inhibitor	Assembly Biosciences, USA	assemblybio.com	Phase II
ABI-H2158		Capsid inhibitor	Assembly Biosciences	assemblybio.com	Phase II
RG7907		Capsid inhibitor	Roche, Switzerland	roche.com	Phase I
QL-007		Capsid inhibitor	Qilu Pharmaceuticals, PR China	qilu-pharma.com	Phase I
EDP-514		Capsid inhibitor	Enanta Pharma, USA	enanta.com	Phase I
ABI-H3733		Capsid inhibitor	Assembly Biosciences, USA	assemblybio.com	Phase I
ZM-H1505R		Capsid inhibitor	ZhiMeng Biopharma, PR China	core-biopharma.com	Phase I
GLP-26		Capsid inhibitor	Emory University, USA	emory.edu	Preclinical
ALG-000184		Capsid inhibitor	Aligos Therapeutics, USA	aligos.com	Preclinical
HBsAg Inhibitors		Interferes with production of HBV surface antigen (sAg)			
Rep 2139		sAg inhibitor	REPLICor, Canada	replicor.com	Phase II
Rep 2165		sAg inhibitor	REPLICor, Canada	replicor.com	Phase II
ALG-10133		sAg inhibitor	Aligos Therapeutics, USA	aligos.com	Phase I
Antisense Molecules		Binds to the viral mRNA to prevent it from turning into viral protein			
GSK 3228836 *(IONIS-HBVRx)*		Prevent viral protein production	Ionis Pharma with GSK, USA	ionispharma.com	Phase II
ALG-020572/020576		Prevent viral protein production	Aligos Therapeutics, USA	aligos.com	Preclinical
INDIRECT ACTING ANTIVIRALS		Targets the human immune system to attack the HBV virus			
Therapeutic Vaccines		Vaccine technology used to stimulate the immune system as a treatment			
HepTcell		Therapeutic vaccine	Altimmune, USA	altimune.com	Phase II
AIC 649		Therapeutic vaccine	AiCuris, Germany	aicuris.com	Phase I
INO-1800		Therapeutic vaccine	Inovio, USA	inovio.com	Phase I
HB-110		Therapeutic vaccine	Ichor Medical Genexine, USA	ichorms.com	Phase I
TG1050		Therapeutic vaccine	Transgene, France	transgene.com	Phase I
VTP-300		Therapeutic vaccine	Vaccitech, USA	vaccitech.co.uk	Phase I
JNJ 64300535		Therapeutic vaccine	Janssen, Ireland	janssen.com	Preclinical
HBV		Therapeutic vaccine	GeoVax Labs, USA	geovax.com	Preclinical
VBI-2601		Therapeutic vaccine	VBO Vaccines, USA	vbivaccines.com	Preclinical
Chimigen HBV		Therapeutic vaccine	Akshaya, Canada	akshayabio.com	Preclinical
CARG-201		Therapeutic vaccine	CaroGen, USA	carogencorp.com	Preclinical
HBV		Therapeutic vaccine	HOOKIPA Pharma, Austria, with Gilead	hookipapharma.com	Preclinical
TherVacB		Therapeutic Vaccine	Helmholtz Zentrum Muenchen, Germany	dzif.de/en/hepatitis	Preclinical
Innate Immune Defense Pathway		Compounds that activate the innate immune system			
Selgantolimod GS9688		TLR-8 agonist	Gilead Sciences, USA	gilead.com	Phase II
RG7854		TLR-7 agonist	Roche, Switzerland	roche.com	Phase I
Host Acting Pathway		Compounds that induce programmed cell death (apoptosis)			
APG-1387		Apoptosis Inducer	Ascentage Pharma, China	en.ascentagepharma.com	Phase II
CRV 431		Ciclofillin inhibitor	Hepion, USA (formerly ContraVir)	hepionpharma.com	Phase I
Viral Gene Editing					
EBT106		CRISPR/Cas 9	Excision Bio, USA	excisionbio.com	Preclinical
HBV		ARCUS platform	Precision Bio, USA	precisionbiosciences.com	Preclinical
Other					
GC1102		Monoclonal anti-HBsAg antibody	Green Cross, South Korea	globalgreencross.com	Phase II
ASC22 *(KN035)*		PD-L1	Ascletis Pharma, PR China	ascletis.com	Phase II
Vir-3434		Monoclonal antibody	Vir Biotech, USA	vir.bio	Phase I
EYP001		FXR agonist	Enyo Pharma, France	enyopharma.com	Phase I
RG6084		Host targeting antisense (LNA)	Roche, Switzerland	roche.com	Phase I
LTCR-H2-1		T cell immunotherapy	Lion TCR, Singapore	Liontcr.com	Preclinical
HBV		MicroRNA	Regulus Therapeutics, USA	regulusrx.com	Preclinical
ENOB-HB-01		Nucleic Acid-directed HBV cell killing	Enochian BioSciences, USA	enochianbio.com	Preclinical
GV1001		"Novel peptide"	GenVax & KAEL, South Korea	gemvax.com	Preclinical
CP101		Oral microbiotic	Finch Therapeutics, USA	finchtherapeutics.com	Preclinical
HEPATITIS DELTA VIRUS (HDV)		A virus that co-infects people already infected with HBV			
Hepcludex *(Bulevirtide formerly Myrcludex B)*		Entry inhibitor	MYR-GmbH, Germany	myr-pharma.com	Approved in Europe Aug 2020
Lonafarnib		Prenylation inhibitor	Eiger Biopharma, USA	eigerbio.com	Orphan Drug Phase III
REP 2139 / REP 2165		HBsAg inhibitor	REPLICor, Canada	replicor.com	Phase II
Ezetimibe		NTCP inhibitor	Ziauddin University Hospital, Pakistan	zu.edu.pk	Phase II
GI-18000		Immune Response Stimulator	GlobeImmune, USA	globeimmune.com	Preclinical

* Generics Available

Commentary on the Cure:

What Happened to the Cure for Hepatitis B?

By Timothy Block, PhD, Chari Cohen, DrPH, MPH, & Maureen Kamischke; May 2020

JUST 10 YEARS AGO, interest in finding a cure for hepatitis B virus (HBV) spiked. Western interest in Asia, where HBV is an enormous health problem, and the growing prosperity in China, fueled global excitement and possibility. The success of curative therapies for hepatitis C virus further raised expectations that a cure for HBV was within reach, as well. Were those expectations unrealistic? Was there over-promising? Where are we now?

A "functional" cure would be a drug that causes sustained loss of viral DNA and loss of surface antigen (HBsAg) in the blood.

We all want an HBV cure that makes people living with HBV at no greater risk for liver disease, including liver cancer, than people without HBV. Since determining if a drug can actually achieve that kind of clinical benefit would take too long (perhaps a decade or more), a more practical definition of cure has emerged. This is the "functional" cure, which relies upon specific "markers" or "surrogates" of disease. It is hoped this surrogate provides a "prediction" of a clinical cure. So, is even a "functional" cure a realistic goal?

It is now known that even the currently available medicines for HBV can achieve the sustained "off drug, sustained virological responses" embodied in the "Functional Cure," in at least some individuals. However, this occurs in only a small number of people. We hasten to add that research is making it clearer who with HBV would be likely to experience this benefit from the currently available drugs. But more research and innovation are critical.

Recent advances in the scientific understanding of new viral and immunological antiviral targets, and new experimental systems, are leading to innovations in drug discovery. We know of at least 48 drugs currently in development, of which 27 are already in clinical trials! This is a huge leap from 2010 *(See Table 1)*. Moreover, the new drugs are not just "me too" drugs, repurposed from research in other disease areas. Many are "First in class," hitting HBV therapeutic targets that have never been previously attempted. This shows just how far we have come, and how much more HBV research is being conducted today compared to 10 years ago.

However, finding treatments and cures is a **challenge and a long road** — and we must be prepared for ups and downs. The likelihood that a specific drug for any disease or condition will be effective, let alone be a "cure," is fairly low. Fewer than one in five drugs that make it to clinical trials are ever "approved" by the FDA for use. And we are likely going to need a combination of drugs that complement each other in order to have even a functional cure for HBV. So, we need many more than just one drug to survive the development process.

Impressive progress toward an HBV cure has been made, but we are not there.

Until very recently, commercial, philanthropic and government investment in HBV research has lagged.

We have little doubt that important, effective new drugs that help with sustained virological responses, and greatly improve clinical outcome, are possible, and are being developed. However, as confident as we are about what is possible, we want to be honest about how difficult and expensive this process is, and the extent to which progress is constantly threatened. As new drugs fail in their clinical trials, which is inevitable, pharmaceutical and drug development companies may become frustrated. New, more "business" attractive diseases and pathogens may emerge. Business investment may lag. And each new health crisis will distract from HBV research and add additional temptations and priorities, that will distract from the cause of an HBV cure. The COVID-19 crisis is an example. HCV was a previous example. To keep the research going, we need other sources of funding support — this could include multi-country federal funding and support from corporations and nonprofit health-focused funds. Unfortunately, there continues to be little interest to prioritize hepatitis B — which is baffling for a disease the impacts almost 300 million people worldwide and kills almost 900,000 people each year. We suspect this has something to do with the lack of a global voice for hepatitis B. We need people who are impacted by hepatitis B around the globe to raise their voice and demand that hepatitis B be prioritized as a global health threat. This can help motivate country leaders and funders to put forth more resources and support towards finding a cure.

In the past decade, impressive progress toward an HBV cure has been made, but we are not there, yet. Until recently, commercial, philanthropic and government investment has lagged — and there is still not enough prioritization or funding to eliminate hepatitis B. This is a call to action for us, at the Hepatitis B Foundation, and those around the world that we engage with. We cannot let up on our effort. It is critical that organizations such as the **Hepatitis B Foundation**, **ICE-HBV**, **World Hepatitis Alliance** and others — as well as individuals around the world — keep up the advocacy. Together, we remain steadfast in our efforts, and hope to **keep filling the pipeline of innovations, as scientists work towards finding a cure for HBV.**

Table 1. Drugs in Development for HBV and HDV: Then & Now

	2010	2020
Approved for HBV	7	8
Clinical	11	27
Pre-Clinical	4	21
Total Investigational	15	48
Investigational Drugs for HDV (excluding IFN*)	0	4

*Interferon

About the Authors

Timothy Block is president and co-founder of the Hepatitis B Foundation and Baruch S. Blumberg Institute.

Chari Cohen is senior vice president of the Hepatitis B Foundation and associate professor of the Baruch S. Blumberg Institute.

Maureen Kamischke is director of international engagement of the Hepatitis B Foundation.

Operations, research continue despite PANDEMIC

DESPITE THE GLOBAL PANDEMIC, the **Hepatitis B Foundation** and its two sister organizations, the **Baruch S. Blumberg Institute** and **Pennsylvania Biotechnology Center** (PABC), have continued operations with limited interruptions.

The Blumberg Institute remains committed to hepatitis B and liver cancer translational research, and those affected should know that the Institute's researchers remain focused and passionate about fighting those diseases. But everyone also has been affected by the COVID-19 crisis, and some of the work that has been ongoing at the Institute can contribute to meeting the COVID-19 challenge.

The Blumberg Institute's pandemic-related research is focused on repurposing existing drugs and methods for treatment of COVID-19. **Timothy M. Block, Ph.D.**, president and co-founder of the Institute, Foundation and PABC, says a team is researching a drug candidate they developed years ago to determine if it could be effective against COVID-19.

"We have been working on antiviral drugs for two decades at Blumberg," Block said. "Our focus has been hepatitis B, liver cancer and other cancers, but some of the drugs we have discovered appear to have activity against other viruses."

Dr. Block recently received a grant from the Commonwealth of Pennsylvania to support that work. In fact, when the state announced 23 new grants in August, four of them, totaling more than $1.1 million, went to researchers at the PABC.

Expanding our home and research facilities

Construction has begun on a $19 million expansion of the non-profit **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 on hepatitis B and liver cancer.

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.

Work should be finished by Ocxtober 2021. You can follow the project on the Biotechnology Center's website and social media.

Top scientists lined up for Blumberg Institute online seminars

DISTINGUISHED SPEAKER SEMINARS

The **Baruch S. Blumberg Institute,** which is the Hepatitis B Foundation's research arm, has assembled a strong lineup of prominent researchers in hepatitis B and liver diseases for its online *Distinguished Speaker Seminars*, which are free-of-charge and open to anyone interested (pre-registration is required).

Upcoming seminars are listed on page 8 in the Calendar of Events and on the Institute's website, **www.blumberginstitute.org**, where you also can watch recordings of previous Blumberg 2020 Research Seminars.

Policy program expanded, manager named

We have launched a new **Hepatitis B Prevention Policy Program** aimed at increasing adult hepatitis B vaccination rates in the United States.

The program will build out and expand on our policy and advocacy initiatives while increasing engagement with federal and state public health agency partners to improve hepatitis B prevention and vaccination infrastructure and strategies.

Michaela Jackson

The new program manager is **Michaela Jackson**, who has been on the Hepatitis B Foundation's public health team since 2018.

Foundation staffer is a *Health Hero*

To commemorate **Asian Pacific American Heritage Month**, the Association of Asian Pacific Community Health Organizations (AAPCHO) annually honors a group of Health Heroes, whom they identify as "individuals who are committed to improving the health of Asian Americans, Native Hawaiians and Pacific Islanders."

Rhea Racho, MPAff, Hepatitis B Foundation Public Policy and Program Manager, is among this year's Health Heroes. Last year and in 2018 that honor was accorded to Foundation co-founder **Joan Block, RN, BSN**, and our Deputy Director of Public Health, **Kate Moraras, MPH**.

30th Anniversary celebration planning underway

HEPATITIS B FOUNDATION
CELEBRATING 30 YEARS TOGETHER

For three decades, the **Hepatitis B Foundation** has worked to find a cure and improve the quality of life for those living with hepatitis B worldwide. In 2021, we will celebrate our *30th Anniversary*. The Foundation's annual *Crystal Ball Gala* event, which is set for **April 30**, will serve as a focal point of our celebration, with a special event in December of 2021 to serve as the culmination.

The theme for the *30th Anniversary* is "Celebrating 30 Years Together." Along with the events we are planning, the Foundation will continue to raise awareness and spread the word about this major milestone and, more importantly, the Foundation's many accomplishments.

In January, we will launch a video series highlighting selected leaders, supporters, partners and professionals such as **Joan and Tim Block, former Congressman Jim Greenwood, and Nobel-Prize Winner Dr. Baruch S. Blumberg**.

The Foundation also will convey the good news through social media and share anniversary messages and content in our newsletters. We are building a *30th Anniversary* website to highlight the history of the Hepatitis B Foundation, including the establishment of our two partner organizations, the Baruch S. Blumberg Institute and the Pennsylvania Biotechnology Center. The Foundation will apply the *30th Anniversary* brand to all of our special events and regular communications to commemorate this exciting milestone.

The foundation's co-founders in 1991, from left, Tim Block, Janine and Paul Witte and Joan Block.

In 1991, Paul and Janine Witte with Timothy and Joan Block were deeply moved by the plight of a young family affected by hepatitis B. To the dismay of the Wittes and Blocks, they found there was no place for this family to turn for support, nor was any organization devoted to finding a cure for hepatitis B.

With the personal support of Dr. Blumberg, who won the Nobel Prize for his discovery of the hepatitis B virus, and the help of the Bucks County community, the Wittes and Blocks responded to this unmet need by working tirelessly to establish the Hepatitis B Foundation.

Today, the Hepatitis B Foundation has since grown from a grassroots effort into a professional organization with a global reach.

Your gift gives hope to millions affected by hepatitis B.

Make a secure donation online at www.hepb.org

☐ **YES!** I want to support the Hepatitis B Foundation with a tax-deductible gift.

Name _____

Address _____

City _____ State _____ Zip _____ Email _____

Donation Amount: ☐ **$25** ☐ **$50** ☐ **$100** ☐ **Other $**_____

Please charge my gift to my credit card: ☐ Mastercard ☐ Visa ☐ American Express ☐ Discover

Name on Card _____ Exp Date _____

Card # _____ Security Code* _____

Signature _____

*We cannot process your donation without the security code.

Please make check payable to: Hepatitis B Foundation
Use remittance envelope or mail to: 3805 Old Easton Road, Doylestown, PA 18902 USA

Donations will be acknowledged in our Annual Report unless otherwise requested.
A copy of the official registration and financial information may be obtained by calling the PA Department of State toll-free within PA at 800-732-0999 or out-of-state at 717-783-1720. Registration does not imply endorsement.

HEPATITIS B FOUNDATION
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Hepatitis B by the numbers

Around the world…

- Hepatitis B is **one of the most common chronic infections worldwide.**
- About **300 million** people are living with a chronic hepatitis B infection.
- Each year about **884,000** people die from hepatitis B.

In the United States…

- Up to **80,000** Americans become infected with hepatitis B annually.
- More than **2 million** Americans are chronically infected.
- More than **50%** of Americans with chronic hepatitis B infections are of Asian and Pacific Islander descent; hepatitis B is the #1 health disparity for Asian Americans and Pacific Islanders.
- **Thousands** of Americans die each year from hepatitis B.

Calendar of Events

2020

Dec. 2-4
Hep B United Summit (1st Virtual)
hepbunited.org

Dec. 3, 11 a.m. EST
Blumberg Institute Distinguished Speaker Seminar: Stephan Urban, University Hospital Heidelberg
Inhibitor of entry as a therapeutic for hepatitis B and D
Registration is free
blumberginstitute.org/seminars/online/

Dec. 10, 11 a.m. EST
Blumberg Institute Distinguished Speaker Seminar: Dongfang Liu, Rutgers New Jersey School of Medicine
Natural Killer (NK) cells from basic immunobiology to clinical application
Registration is free
blumberginstitute.org/seminars/online/

2021

Feb. 3-6
Asian Pacific Association for the Study of the Liver Annual Meeting
Bangkok, Thailand
apasl.info

April 9-14
American Association for Cancer Research Annual Meeting
Washington, DC, USA
aacr.org

April 30
Hepatitis B Foundation's 30th Anniversary Gala
hepb.org

June 4-8
American Society of Clinical Oncology Annual Meeting
Chicago, IL, USA
asco.org

July 28
World Hepatitis Day

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This issue *B Informed* and all back issues are online at www.hepb.org.

For More Information About Hepatitis B Foundation Programs

- **HBV Info & Support List …** HBList.net
- **HBV Clinical Trials …** hepb.org/clinicaltrials
- **HBV Drug Watch …** hepb.org/drugwatch
- **Hepatitis Delta Connect …** hepDconnect.org
- **Liver Cancer Connect …** livercancerconnect.org