

Tomorrow's Cures

Hope and Promise Through Liver Disease Research

**The Case for Support for the American Association
for the Study of Liver Diseases Foundation**



Amon Asgharpour, MD
Mount Sinai Health System
2016 AASLD Foundation
Advanced/Transplant
Hepatology Award Recipient

"Your contributions help us achieve our mission of investing in innovative hepatology research and in the people who study and treat liver disease. On behalf of AASLD Foundation, I thank you for your support of the Foundation and the *Tomorrow's Cures* campaign. It is the commitment of our generous donors and talented members that allows us to envision a world without liver disease."

Bruce R. Bacon, MD, FAASLD
Chair, AASLD Foundation
Chair, *Tomorrow's Cures* campaign

Making the Impossible Possible: A World Without Liver Disease

In our lifetime, advancements in liver disease research and care have become extraordinary promises of hope for those suffering from the devastating effects of liver disease. From liver transplantation to HCV cures, the lives of countless patients have been transformed through outstanding patient care and innovative cures.

However, liver disease continues to be a major health problem. To get closer to a world without liver disease, a consistent, stable source of funding is required. As the largest private supporter of liver disease research and training in the United States, AASLD Foundation will continue to be that stable source of funding, **but we need your support.**

Whether you are a researcher fueled by a passion to pursue discovery leading to the next liver disease cure, a clinician making a difference in the lives of patients and their families, or an industry partner committed to new treatment options — you share this vision of a world without liver disease.

Your contribution to the *Tomorrow's Cures* campaign will demonstrate your investment in bringing about tomorrow's cures and delivering on the hope and promise hepatology holds for millions of patients.

Your partnership with AASLD Foundation will lay the groundwork for a world without liver disease.

Sources: * Everhart, James E., and Constance E. Ruhl. "Burden of Digestive Diseases in the United States Part III: Liver, Biliary Tract, and Pancreas." *Gastroenterology*, vol. 136, no. 4, 2009, pp. 1134-1144

** National Vital Statistics System, National Center for Health Statistics, CDC



Approximately 15,000 children are hospitalized for liver disease and over 500 require transplants each year in the US *



In 2016, liver disease was cited among the top five causes of death for people aged 45-54 in the US **



Viral hepatitis has resulted in a loss of 101,800 years of potential life before age 75 *



Rates of ambulatory care have increased more than fourfold *



If liver disease visits were combined with the 3.5 million evaluations of viral hepatitis, it would be the third leading diagnosis in the US *



Since AASLD Foundation's inception in 2014, an average of

85%

of Foundation spending has directly supported research and career development awards and programs

A Bold Vision for the Future

AASLD Foundation was created to fill the void between bright, talented researchers and the funding needed to encourage their discoveries.

We seek to save lives by aggressively pursuing the prevention and ultimate cure of liver disease and aim to inspire the next generation of hepatologists by supporting innovative research and connecting young investigators to essential training resources that they otherwise would not be able to attain.

We provide essential resources to train health care professionals in providing care for patients with liver disease. Our leaders are the health care professionals providing direct care to patients. We know hepatology, and its challenges, better than anyone.

"It is my pleasure to support AASLD Foundation. It's amazing to see the progress in liver disease over the last 30 years – when no good treatment other than steroids for autoimmune hepatitis and abstinence for alcoholic liver disease were available, to more and more liver diseases having become curable (HCV) or at least controllable (HBV)."

Hans L. Tillmann, MD, FAASLD
Duke University

A Brief History of AASLD and AASLD Foundation Awards

AASLD Foundation Provides Critical Funding to Young Scientists

AASLD is legally incorporated in Illinois.

The first awards are given for summer fellowship and travel to the Annual Meeting.

The inaugural **Jan Albrecht Commitment to Clinical Research Award** is conferred.



The AASLD Governing Board established the Foundation to invest in innovative hepatology research and in the people who study and treat liver disease.

1950

1977

1997

2014

Today, we are expanding the Foundation's impact through a bold, focused plan. The Foundation seeks to raise **\$12.5 million** or more in philanthropic support to:



Build **stable funding resources** to bring us closer to the vision of **100% meritorious** award funding



Raise more **unrestricted funds**, allowing flexibility to address new research needs in hepatology



Enhance **training and education** to build a robust **workforce that is ready to care for our patients**



Increase **public awareness** of liver disease

RIGHT:
Christina C. Lindenmeyer, MD
Cleveland Clinic
2013 AASLD Emerging Liver Scholar
2017 AASLD Foundation Advanced/
Transplant Hepatology Award Recipient



AASLD Foundation funds a record-breaking \$4.06 million in career development and research awards, the highest amount funded in the history of AASLD and AASLD Foundation.



TODAY

AASLD Foundation anticipates **growing its resources to be able to fund closer to 100% of meritorious awards** for finding innovative ways to treat all forms of liver disease.

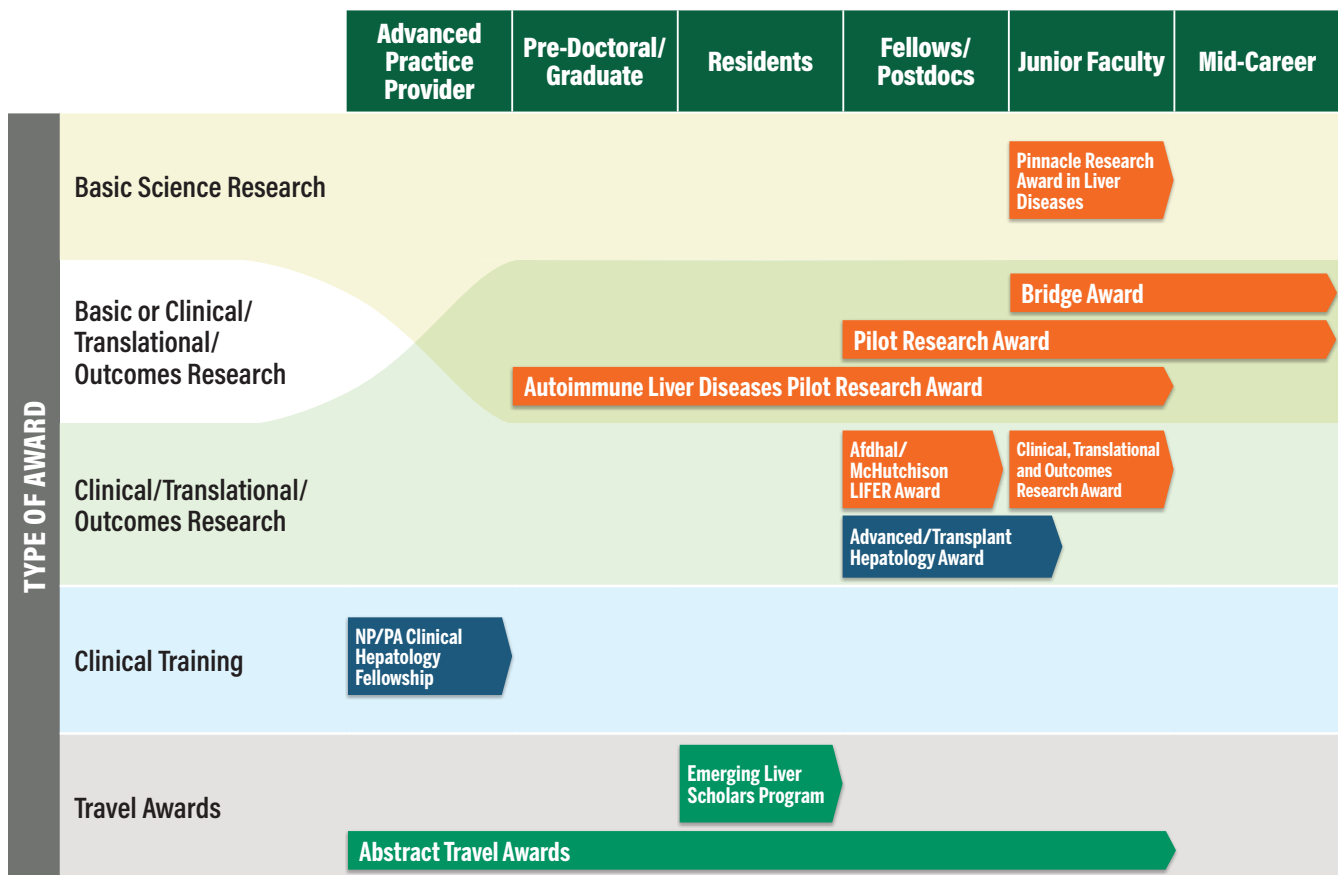
2018

Investing in Life-Changing Discovery and Cure

AASLD Foundation is the largest private supporter of liver disease research and training in the United States.

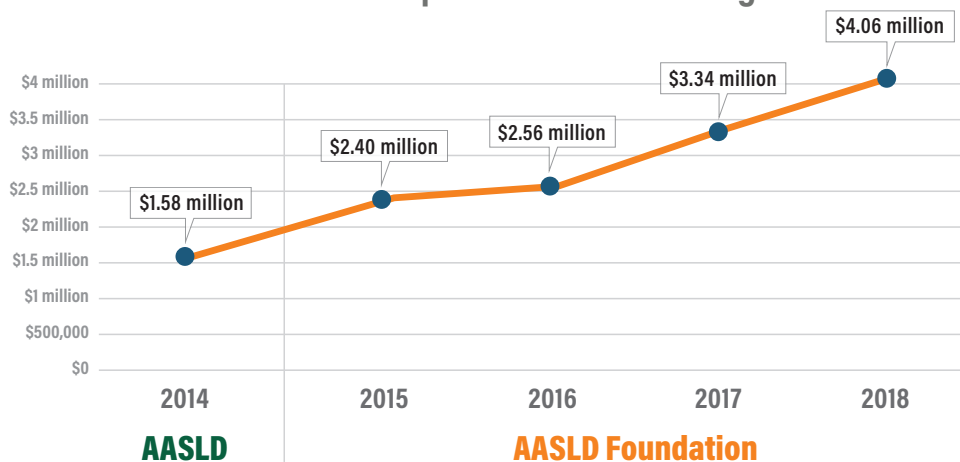
Through its Research and Career Development Awards, aimed at basic, clinical and translational researchers from student to mid-career, as well as front-line providers who want to pursue advanced clinical training in hepatology, AASLD Foundation provides funding for liver research, encourages young investigators new to the field, secures education and training for clinicians and increases access to trained hepatology providers.

AASLD Foundation Awards Portfolio



The Foundation continues AASLD's legacy of supporting research and career development — together, we have invested more than **\$47 million in awards since 2000**. This funding has had a remarkable impact on the careers of researchers and health care providers who study and treat liver disease. It has pushed the boundaries of what's possible in the world of liver disease research and care.

Five-Year Funding Levels for Research and Career Development Awards Funding*



*Does not include funding for travel and abstract awards

AASLD and AASLD Foundation Awards Impact

1,283 TOTAL AWARDS	\$47.1 million AWARDS VALUE
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 119 RESEARCH AWARDS \$20.49 million	 390 CAREER DEVELOPMENT AWARDS \$26 million	 774 ABSTRACT AWARDS \$613,000
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"After applying for a VA Merit Award and being close to a funded score, I knew our research into epigenetic mechanisms of NAFLD was of interest but needed a mechanism to generate a bit more preliminary data. With the Bridge Award, we now have the means to expand our initial findings and successfully re-submit not only a VA Merit but also future independent NIH funding. Thank you AASLD Foundation!"

Cynthia A. Moylan, MD, MHS
Duke University
2018 AASLD Foundation Bridge Awardee
(Pictured left in photo)

In 2018, in response to the continued growth in highly meritorious applications, the introduction of new Pilot and Bridge funding mechanisms and increased funding levels across the portfolio, AASLD Foundation committed to the highest awards investment in the history of the Research and Career Development Awards program — \$4.06 million to support 36 awards.

The Foundation plans to invest more than \$170,000 in travel awards in 2018, including the Emerging Liver Scholars Program and the Abstract Travel Awards. These awards enable young investigators to present their work to an international audience at The Liver Meeting®.

Through the *Tomorrow's Cures* campaign, we hope to continue to fund \$3 million or more annually and to sustain this major source of investment and opportunity for bright and promising liver disease researchers and clinicians. In addition to these awards, AASLD Foundation will dedicate additional funds to Abstract Awards and Emerging Liver Scholars Awards — demonstrating commitment to encouraging more early career investigators to pursue careers in hepatology.



100% of awardees
report funding through
AASLD Foundation had a
positive impact on their career



Every dollar the Foundation invests
in research awards leads to
\$2.49
in subsequent funding
from the NIH, DoD or VA*

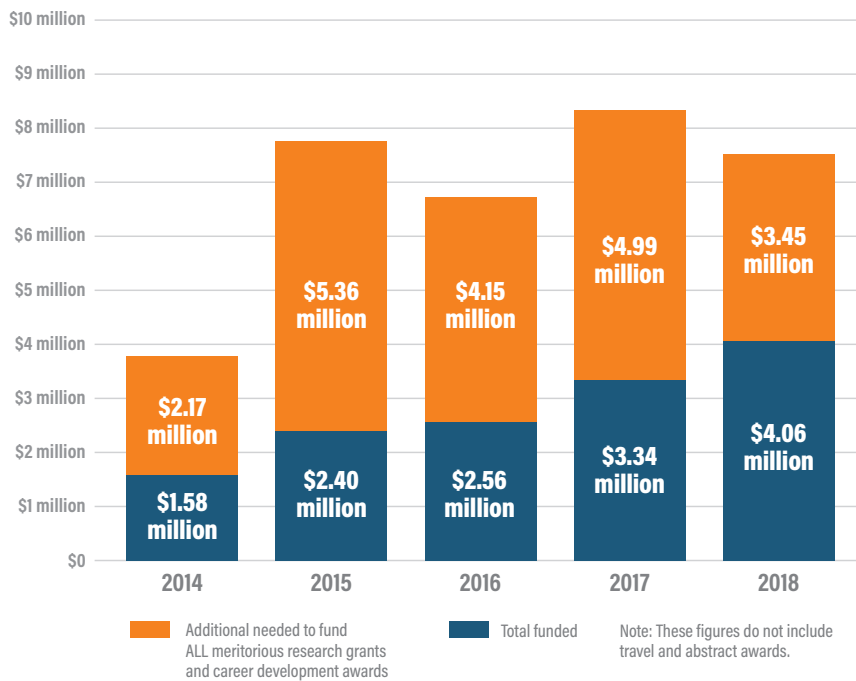
*AASLD/AASLD Foundation Research Awardees funded in Award Years 2009–2016. Data obtained from Federal RePorter.

Help Us Bridge the Funding Gap

Despite AASLD Foundation's increasing funding, we still have a sizable gap. This funding gap — in 2018, a gap of \$3.45 million — represents lost discovery and ultimately lost lives.

We continue to see competition for NIH liver research funding rise, making it even more challenging for young hepatologists to receive the grants that enable them to pursue a career in research. Without funding, we may lose prospective researchers to other career paths, and all the potential they had for improving the lives of those afflicted with liver disease is lost.

Research and Career Development Funding Gap



Research and Career Development Awards Experience Unprecedented Growth



55%

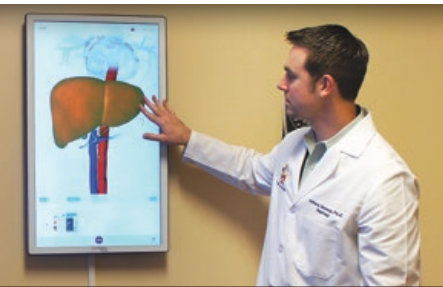
increase in award applications from 2017 to 2018

Only 60% of meritorious research award applications could be funded in 2018

Our Awards Make Research Possible

AASLD Foundation's Research and Career Development Awards have been crucial in helping young researchers create a body of work that makes them competitive for scarce NIH grants and more likely to establish research careers that will transform the lives of patients.

Anthony Derencius, PA-C
Texas Liver Institute
2018 AASLD Foundation
NP/PA Clinical Hepatology
Fellowship Awardee



Brian Kim, MD
Mount Sinai School of Medicine
2013 AASLD Foundation Advanced/
Transplant Hepatology Award Recipient



PICTURED RIGHT IN PHOTO ABOVE:
Negin Karimian, MD, PhD
Massachusetts General Hospital
2014 AASLD/LIFER Clinical and Translational
Research Fellowship Awardee

"The AASLD Foundation Pinnacle Research Award plays an instrumental role in my ability to eventually become an independent investigator. It also supports basic science, which is crucial to enabling the discovery of innovative translational and therapeutic strategies that may improve and ultimately prevent the progression of liver disease. It is an impactful and meaningful award that supports the important work of future generations of liver disease researchers and experts in the field."

Cristina Llorente, PhD
University of California, San Diego
2018 AASLD Foundation Pinnacle Research Awardee
(Pictured right)



Our research funding has had a tremendous impact on advancing hepatology – and our investment in young researchers is showing real returns. AASLD Foundation Research Award recipients reported that:

46%

have gone on to receive federal funding during or post award



Researchers held over \$5 million in NIH funding in fiscal year 2017 alone



17

R Series Awards were received



They collectively have received over \$24 million in federal funding during or post AASLD/ AASLD Foundation Award

13

K Series Awards were received

Research awardees funded by AASLD Foundation are published in major scientific journals and present at scientific meetings worldwide



AASLD/AASLD Foundation Research Awardees funded in award years 2009-2016. Data obtained from Federal RePorter.

We have an opportunity to act now

Investing in AASLD Foundation today means we are better positioned to achieve our vision for tomorrow, including:

- Funding closer to 100% of meritorious award applications
- Enhancing training and educational opportunities to build a robust workforce that is ready to provide exceptional care for patients
- Developing resources for public awareness of liver care and health



Tatyana Kushner, MD, MSCE
Mount Sinai Medical Center

2018 AASLD Foundation Clinical, Translational, and
Outcomes Research Awards in Liver Disease Awardee

“Through the monumental *Tomorrow’s Cures* campaign, we are working to increase the scope and reach of AASLD Foundation by funding more meritorious awards annually. Through your generous contribution, you are closing that gap and paving the way for major advancements in the field of hepatology. This, in turn, leads to more treatments and cures for those afflicted by liver diseases. Thank you for making a difference through your generosity!”

Donald M. Jensen, MD, FAASLD
Vice-Chair, *Tomorrow’s Cures* campaign

Training and Education Opportunities

We are investing in *innovative liver disease research* and in the *people who treat liver disease patients*.

Through initiatives like the Foundation's Fundamentals of Liver Disease online learning curriculum, Nurse Practitioner/Physician Assistant Fellowships and career development programs, we continue to build resources for primary care physicians, physician assistants, nurse practitioners and other health care providers on the front lines of implementing screening recommendations for liver diseases.

Our commitment to encouraging the brightest minds to pursue a career in hepatology is demonstrated by our Emerging Liver Scholars Awards, our Abstract/Travel Awards, and the Memorial Travel Awards. These innovative and popular programs recognize excellence within the early career investigator community while providing unparalleled opportunity for mentoring, education and networking as well as stipends to attend AASLD educational events.



LEFT TO RIGHT:
Julius M. Wilder, MD, PhD
Duke University

2018 Recipient of the AASLD Foundation Clinical, Translational, and Outcomes Research Award in Liver Transplantation in Memory of the University of Michigan Transplant Team

Andrew J. Muir, MD, FAASLD
Duke University
Mentor to Dr. Wilder

AASLD Foundation is leading the way, bringing tomorrow's cures today

Join us as we embark on a transformational initiative to shift the landscape of liver disease. Your support for the *Tomorrow's Cures* campaign will:

- **Advance** the specialty and bring about innovative treatments for liver disease patients
- **Attract** the best and brightest minds to the field
- **Facilitate** collaboration with patients leading to improved awareness about liver health
- **Showcase** your strong commitment to, and belief in, the research, education and training programs that underlie all the great advances and discoveries in the field of hepatology

In return, you can count on AASLD Foundation to be thoughtful stewards of your donation. Rest assured, any gift you give will be used to meet our mission, and it will have a tremendous impact on the future of patients and hepatology.


By convening partners in research, clinical practice, industry, philanthropy and the large liver disease community, the Foundation is actively working to ensure new discoveries that could positively impact the lives of millions of patients.

**Together, we can make great strides in our
shared vision of a world without liver disease.**

**For more information about the
Tomorrow's Cures campaign, contact:**

Julie Deal, Executive Director, AASLD Foundation
(703) 299-9766 or foundation@asld.org

The AASLD Foundation is tax-exempt under §501(c)(3) of the Internal Revenue Code. Contributions made to the AASLD Foundation are charitable contributions deductible to the extent permitted by §170 of the Internal Revenue Code. The Tax Cuts and Jobs Act of 2017 may affect your ability to deduct charitable contributions as itemized deductions in 2018 and subsequent years. We recommend you consult your tax advisor for details.

A female scientist with long brown hair, wearing safety glasses and a white lab coat, is focused on her work in a laboratory. She is using a pipette to transfer liquid into a multi-well plate. The background shows laboratory equipment and a clean, professional environment.

"The *Tomorrow's Cures* campaign provides the perfect opportunity to make an immediate and long-lasting impact. We need bright, young physicians and researchers to get into the field, to stay in the field and to work together to find ways by which we can diagnose liver diseases earlier and discover more treatments and cures."

Anna S. Lok, MD, FAASLD
Chair, Leadership Gifts Division,
Tomorrow's Cures campaign

Nataliya Razumilava, MD
University of Michigan
2016 AASLD Foundation
Pinnacle Research Awardee



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