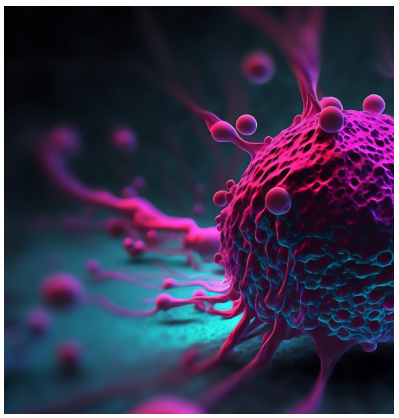
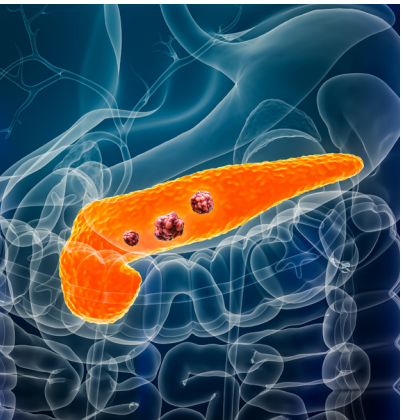
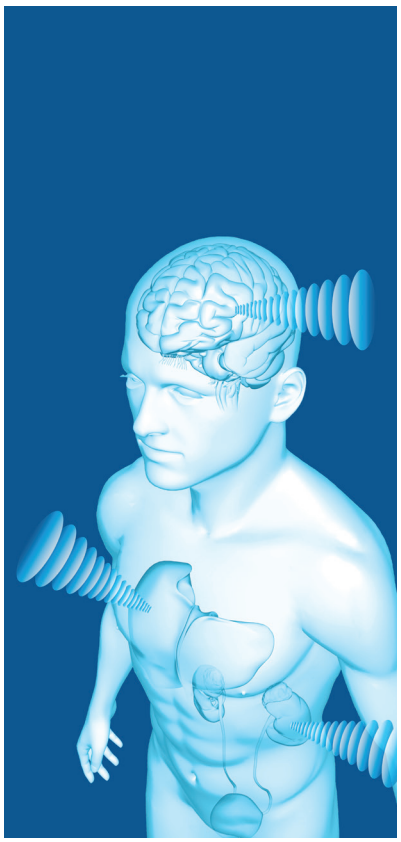
Focused Ultrasound Foundation

2023

Year in Review







2023 was a breakout year

Many groundbreaking research "firsts" for focused ultrasound—including more than 100,000 patients treated and the first histotripsy approval in the world—occurred last year. Focused ultrasound is gathering momentum at an accelerating rate, and the infusion of additional resources will enable rapid scaling of the technology and improve the lives of millions around the world.

As the technology continues to push boundaries and provide hope for those suffering with debilitating diseases, the Foundation is increasingly aware of the gap between the reality of focused ultrasound today and its incredible potential in the not-too-distant future. It is immense motivation to work harder.

To close this gap, we are sharpening our focus, concentrating on indications and approaches most likely to translate into treatments that fulfill critical unmet needs. And we are working to attract new clinicians to champion the technology and facilitate the successful commercialization and adoption of focused ultrasound.

Thank you all for believing in the mission of advancing focused ultrasound in the shortest time possible. We look forward to transforming lives together in 2024.

Be well. Be happy.

Neal F. Kassell, MD, on behalf of the Foundation team

approvals

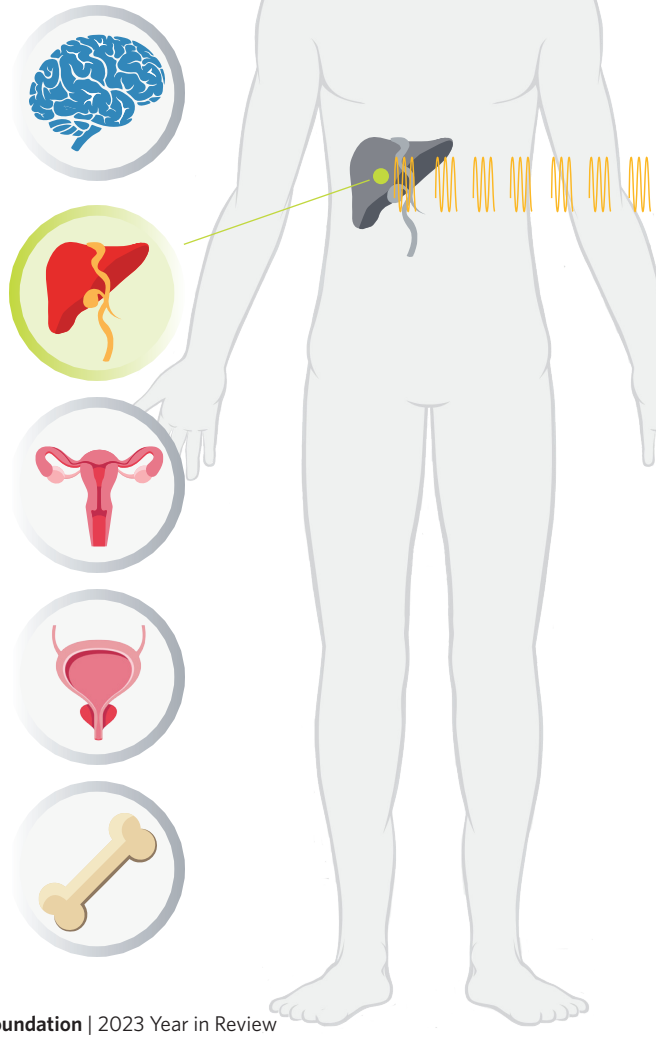
Global adoption

Worldwide 31 indications have regulatory approval in nearly 70 countries. This amounts to 395 global approvals for focused ultrasound. Every year there are new approvals with liver tumors achieving FDA approval in 2023. ■

9 FDA approvals
for focused ultrasound

Clinical diseases

- Essential tremor 2016
- Parkinson's disease, tremor-dominant 2018
- Parkinson's dyskinesia 2021
- **Liver tumors** 2023
- Uterine fibroids 2004
- Prostate diseases 2015
- Benign prostatic hyperplasia (BPH) 2015
- Pain from bone metastases 2012
- Osteoid osteoma 2020



First-ever **histotripsy approval**

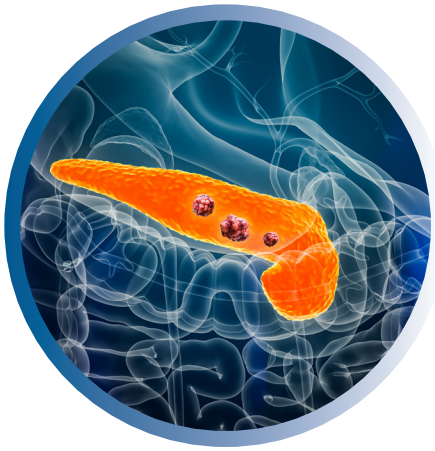
The US Food and Drug Administration (FDA) cleared HistoSonics' novel therapy platform Edison™ to treat liver tumors. This is a world-first marketing authorization for histotripsy, and is the ninth clinical indication for focused ultrasound to be cleared by the FDA.

Histotripsy is a non-thermal mechanism of action of focused ultrasound that produces controlled acoustic cavitation to mechanically destroy and liquify targeted tissue without heating.

Physicians also recently began treating the first renal tumor patients in the #HOPE4KIDNEY pivotal clinical trial using the Edison system. ■

pancreatic cancer

Alpinion Alpius 900



> **“There is an urgent need to develop new treatment options for pancreatic cancer to improve drug delivery and efficacy.”**
>
> — Jae Young Lee, MD, PhD

Clinical trial **success**

Early, proof-of-concept safety data from a pioneering pancreatic cancer focused ultrasound + chemotherapy clinical trial in Korea were published in *European Radiology.*

Jae Young Lee, MD, PhD, used the ultrasound-guided Alpinion focused ultrasound device plus standard-of-care chemotherapy to decrease tumor size in patients with unresectable pancreatic cancer. A larger, 60-patient Phase II study—funded by the Foundation—is now underway in Korea. ■

This icon represents projects that are partially or fully funded by the Foundation.

evidence research milestones

Advancing research

The Foundation prioritizes research funding to advance new applications of focused ultrasound that will fulfill unmet clinical needs, that are cost-effective, and that can become standards of care. The strategic focus of our research program is the rapid development of new indications where focused ultrasound can make an impact. ■

By the numbers

155
projects completed

119
projects with
results published

68
projects with
follow-on or co-funding

By the dollars

$16.2M
funding provided for completed projects

$83.5M
follow-on or co-funding

5x
return on investment
factor by which the Foundation leverages donor contributions

cumulative

Record year

The Foundation partially or fully funded 24 projects in 2023. With an emphasis on neurological, cancer immunotherapy, and oncology indications—such as liver, pancreatic, and breast—these research projects are aiming to drive focused ultrasound forward with groundbreaking advances and tangible clinical results. ■

Projects funded

24
projects initiated

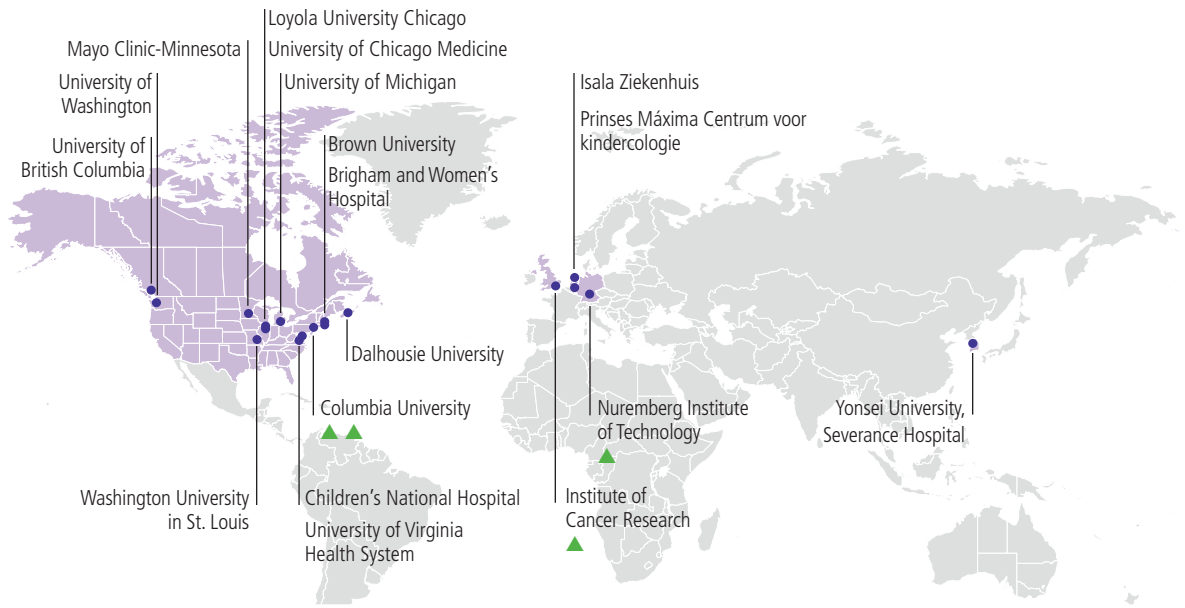
29
projects completed

Locations

18
institutions and organizations

6
countries

4
projects with **co-funding**



2023

neurodegenerative

Results published

Neurodegenerative diseases like Alzheimer's (AD) and Parkinsons disease (PD) are high-priority research areas for the Foundation and the field. Significant breakthroughs occurred in 2023. The results of two clinical trials were published in the prestigious *New England Journal of Medicine* (NEJM). ■

Parkinson's disease

Results of a clinical trial using focused ultrasound to treat the motor symptoms of PD were published in NEJM.

Three months after treatment, 69% of participants showed response to therapy, compared with 32% in the sham cohort, with most improvement sustained after one year. ■

Parkinson's **breakthrough**

A preclinical PD study partially funded by the Foundation at **HM CINAC** in Madrid, Spain, used focused ultrasound + microbubbles to deliver gene therapy across the BBB to regions of the brain affected by PD.

Gene therapy has incredible potential to treat PD because it has the potential to stop the degenerative process, restore damaged neurons, and/or protect undamaged neurons. ■

Alzheimer's disease

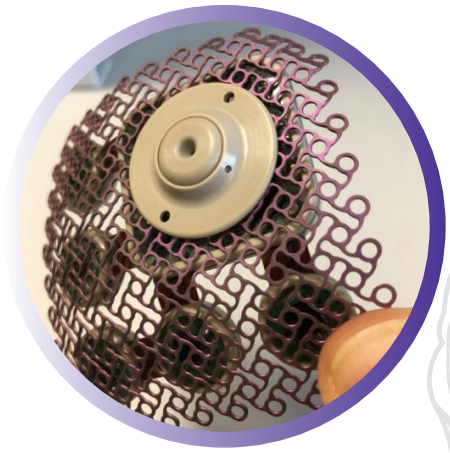
A first-in-human clinical trial at the **West Virginia University Rockefeller Neuroscience Institute** is testing focused ultrasound–induced blood-brain barrier (BBB) opening with drug delivery in patients with AD. Preliminary results showed that focused ultrasound can accelerate the clearance of amyloid-beta plaques, a hallmark of AD. ■

Right: West Virginia University Rockefeller Neuroscience Institute
Photograph WVU

brain tumors

Advancing cancer treatments

First-in-human achievements in 2023 advanced focused ultrasound for the treatment of devastating brain tumors. ■



Carthera's SonoCloud-9® device

Glioblastoma

Results from a US clinical trial using the SonoCloud-9® device for the treatment of recurrent glioblastomas were published in *The Lancet Oncology*. Investigators implanted the device in 17 participants then used it to repeatedly open the BBB and deliver chemotherapy; the method delivered up to a six-fold increase in chemotherapy concentration in the tumor tissue. ■

Pediatric brain cancer

Two separate trials–one at **Columbia University** and a collaborative trial at **Sunnybrook Health Sciences Centre** and **The Hospital for Sick Children** (SickKids)–began in 2023 to assess the use of focused ultrasound to facilitate the delivery of chemotherapy to progressive diffuse intrinsic pontine gliomas (DIPGs), a type of malignant brain tumor that affects children. ■

Noninvasive Biopsy

Data were published from a prospective first-in-human safety and feasibility clinical trial using "**sonobiopsy**," or focused ultrasound–enhanced liquid biopsy. The study, which enrolled five participants with brain tumors, noninvasively enriched blood-circulating biomarkers to give physicians detailed information about the brain tumors. ■

Metastatic **lung cancer**

The first patients in the US were treated in October in Richmond, VA, as part of a new clinical trial investigating focused ultrasound's role in enhancing immunotherapy for non–small cell lung cancer that has spread to the brain. Researchers are using focused ultrasound to open the BBB to enable higher concentrations of immunotherapy drugs to enter the tumor tissue. ■

clinical trials

Advancing body applications

Vital focused ultrasound research took place around the world in 2023 for more than 170 indications, including advancements in neuropathic pain, aortic valve stenosis, and colorectal cancer that has metastasized to the liver. ■

Neuropathic **pain**

Researchers at the **University of Maryland Medical Center** published the final results from the first US clinical trial treating refractory neuropathic pain with focused ultrasound-induced central lateral thalamotomy. The treatment successfully reduced pain scores by over 40% at one year. Led by Dheeraj Gandhi, MD, the phase I trial used Insightec's Exablate Neuro device and was funded by the Foundation. ■

Insightec's Exablate Neuro device

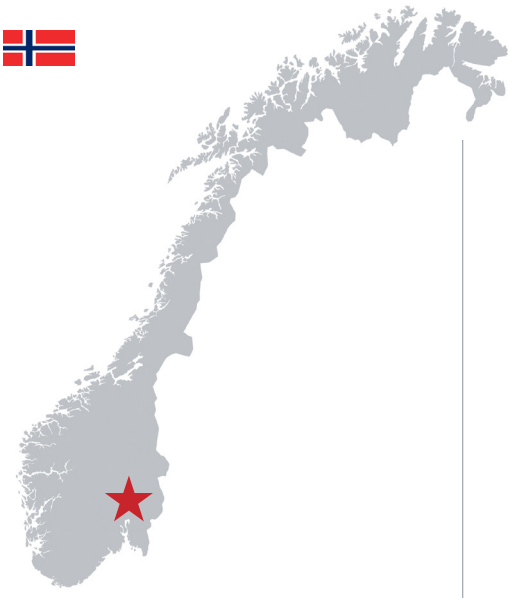
Judith van Beek, Mohamed Bentala, and Ben van den Branden, Amphia Hospital, The Netherlands

Aortic valve stenosis

Cardiawave SA published six-month clinical data in *The Lancet* from its ongoing, first-in-human Valvosoft® studies to treat severe symptomatic calcific aortic valve stenosis. The device delivers focused ultrasound to calcified aortic valves to soften the valve leaflets and improve function. ■

Liver metastases

Researchers in Norway completed a clinical trial using **focused ultrasound + microbubbles** to treat 17 participants undergoing chemotherapy for colorectal cancer with disseminated metastatic liver disease. The treatment was safe and feasible, and the group suggested larger studies with standardized protocols to assess efficacy. ■



collaborations

Strategic partnerships

By partnering with organizations that share our passion for results and collaboration, the Foundation expands its reach in the global community, deepens stakeholder investment, and leverages donor contributions. Three new strategic partnerships aim to advance the technology. ■

Parkinson's disease

The Foundation partnered with **The Michael J. Fox Foundation for Parkinson's Research** to fund a clinical trial investigating the use of focused ultrasound to enhance a brain tissue sampling technique—called liquid biopsy—in patients with PD. The study will evaluate safety and preliminary efficacy of using Insightec's Exablate Neuro focused ultrasound device to disrupt the BBB, allowing proteins related to PD to escape the brain and be detected in the peripheral blood. ■

Improving treatment of ALS

The Foundation partnered with **The ALS Association** to advance transformational treatments for people with amyotrophic lateral sclerosis. Leveraging a $500,000 ALS Association Partnership Grant and $500,000 of its own funds, the Foundation will support research into diagnosing and treating ALS using focused ultrasound technology. ■

Capitol Hill fly-in

Patients, physicians, and industry representatives traveled to Washington, DC, in June to advocate for increased funding for and access to focused ultrasound. Four patients shared their personal stories of receiving focused ultrasound to treat PD, essential tremor, and prostate cancer.

The event was hosted by the Foundation in partnership with the **Medical Imaging & Technology Alliance** (MITA). ■

international

FUSF + FUSHK
Asia visit

A Foundation team traveled to Asia in late 2023 to meet with the directors of the **Focused Ultrasound Hong Kong Foundation Limited** (FUSHK) and connect with various stakeholders in the region. There is a tremendous amount of focused ultrasound research activity in China, Korea, Japan, and Taiwan, and the Foundation has committed more than $3 million to support nearly 20 research projects in the region. Asia also has a robust device manufacturing industry. The Foundation team visited seven companies in China and Korea and offered recommendations for navigating international regulatory approvals and identifying sources of capital through the Foundation's FUS Partners program. ■

+

+

Prost8 + UKFUSF

The **UK Focused Ultrasound Foundation** (UKFUSF) collaborated with charity **Prost8** to offer focused ultrasound to men with prostate cancer in the UK. The new unit at Royal United Hospitals Bath—funded by UKFUSF—is a milestone for prostate cancer in Britain; previously, HIFU had only been available in the UK at specialist centers in London and surrounding areas. ■

New
Center of Excellence

The **University of Oxford** was designated a Focused Ultrasound Center of Excellence, becoming Europe's fifth Center of Excellence and the eleventh worldwide. Professor Constantin Coussios and Paul Lyon, FRCR DPhil, are co-leading the center.

Established in 2009, the Centers of Excellence program recognizes exceptional focused ultrasound worldwide. The Centers serve as hubs for collaboration, bringing together academia, industry, and the Foundation to champion therapeutic ultrasound technology in innovative ways. ■

+

patient spotlight

Gabsoo Han

Gabsoo Han, who lives in Korea, was diagnosed with pancreatic cancer at age 68. He participated in a Foundation-funded focused ultrasound clinical trial at **Seoul National University Hospital**, which shortened his chemotherapy regimen and led to a positive outcome.

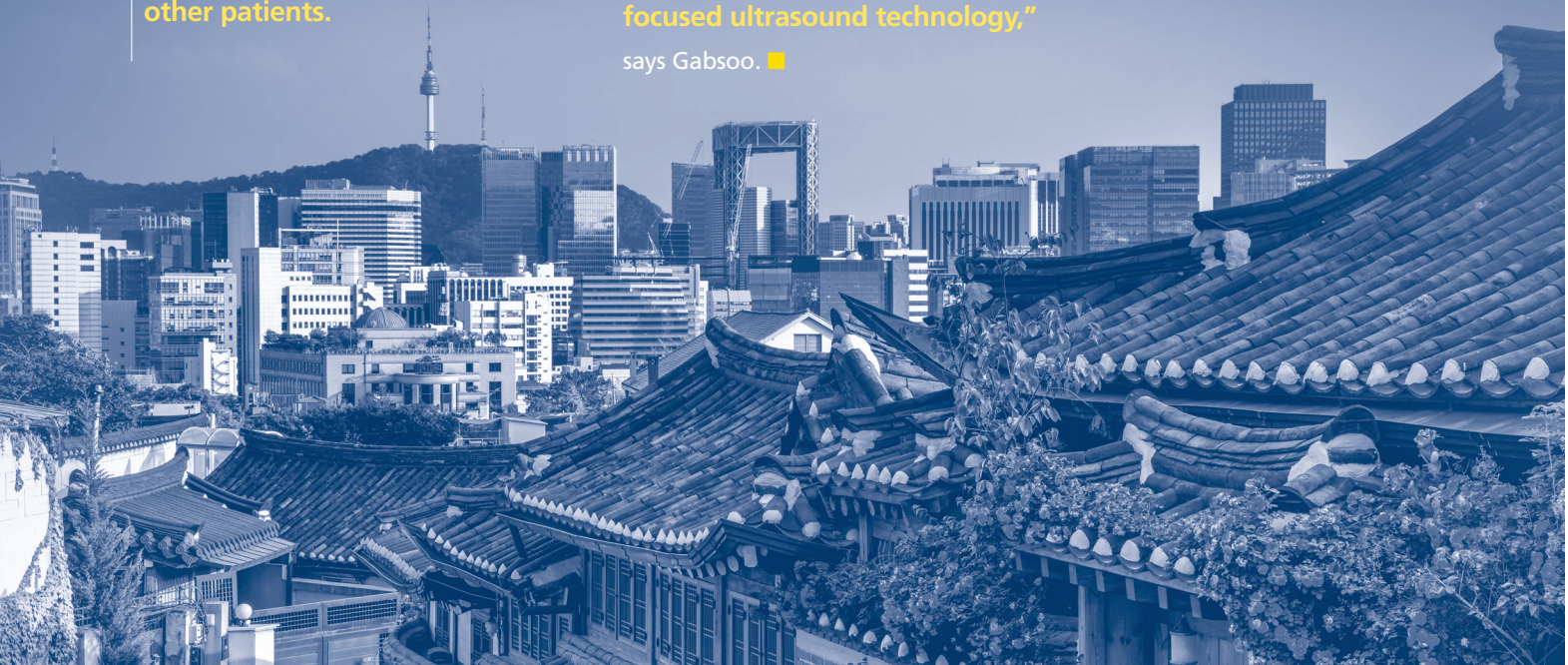
"In September of 2021, I learned I had pancreatic cancer. While hospitalized for chemotherapy treatment, I was told by my gastroenterologist about a clinical trial treating pancreatic cancer with focused ultrasound. I chose to participate in the clinical trial for the assurance of safety, the opportunity to have free treatment, and to open doors for other patients.

Initially my chemotherapy treatment was done simultaneously with focused ultrasound. But due to positive results, I only had to receive eight of 16 planned rounds of chemo. The chemotherapy had been very challenging for me, but with focused ultrasound, I was peaceful due to no pain.

Today I have resumed my daily life and even reopened my business. Thanks to focused ultrasound, a pancreatic cancer patient with a low survival rate might enjoy normal life again. I am very grateful for the Focused Ultrasound Foundation's support of this clinical trial, and I sincerely wish for the continued development of focused ultrasound technology," says Gabsoo.

Seoul National University Hospital

Read Gabsoo's full story on the Foundation's **website**.



home

Cultivating the next generation

The Foundation is dedicated to cultivating the next generation of focused ultrasound clinicians and scientists through our fellowships and internship opportunities. ■

Lockhart **fellow**

Jacob Young, MD, a neurosurgical resident resident and postdoctoral fellow at the University of California San Francisco whose research focuses on treating glioblastomas, was awarded the 2023 Andrew J. Lockhart Postdoctoral Fellowship in Focused Ultrasound and Immuno-Oncology.

The one-year fellowship is designed to support early-career researchers and help the Foundation cultivate the next generation of investigators who could advance the development and clinical adoption of focused ultrasound in immuno-oncology. ■

2023 **FUSF interns**

Rithika Kormath Anand
Foundation Awareness Presentation Redesign, Focused Ultrasound Landscape Analysis in India

Rozenn Aubry
iPhone Application for Tracking Hand Tremors

Abey Babu
Generative Artificial Intelligence (AI) Research for Focused Ultrasound Foundation Use

Naomi Fuller
3D Acoustic Lens

Alina Jafri
Assembly of Hydrophone Tanks

Chloe Lugg
Exploring Focused Ultrasound and SDT; Communications and Social Media

Gyasi Priester
Rat Brain Tumor Microvascular Ablation

Aditya Biswas
Essential Tremor Tracker; Acoustic Lens, Rat Sonication Simulation

Gabriella D'Alessio
Focused Ultrasound Foundation Family Tree

Sean Fu
Utilizing Natural Language Processing and Generative AI to Accelerate Focused Ultrasound Database Expansion

Caroline Jones
Financial Analysis

Deyan Saleem
Assembly of Hydrophone Tanks

Caroline Render
Focused Ultrasound Research Funding Opportunities

13
FUSF interns

20
Global interns

abroad

2023 **Global interns**

Elizabeth Allen Brigham Young University	**Belmarie Siverio** US Food and Drug Administration
Melody Dibenedetto Columbia University	**Ahmed al-Doori** Virginia Polytechnic Institute and State University
Bhavaya Shah Georgia Institute of Technology	**Jorge Lamar** Brigham and Women's Hospital
Vittoria Longoni Imperial College London	**Carson Reed** Brigham Young University
Junbin Ko Jeju National University	**Zach Johnson** University of Utah
Ana Sofia Narvaez Paliza Kings College London	**A'lyssa Williams** US Food and Drug Administration
Xingzao Shi University College London	**Erica Herlin** Istituto Carlo Besta
Hadrien Padilla University of Michigan	**Lucas Hernandez** Imperial College London
Negar Nasrkhani University of Toronto	**Katie Chin** Columbia University
Addison Powell University of Utah	**Celeste Irwin** Gwangju Institute of Science and Engineering

Scholar

Ekaterina "Katie" Ponomarchuk, a PhD student at **M.V. Lomonosov Moscow State University** in Moscow, Russia, is one of the Foundation's Cultivate the Next Generation Scholars. Ponomarchuk was part of a collaborative project with the Applied Physics Laboratory at the **University of Washington** that funded her study assessing how boiling histotripsy might be used in the treatment of kidney cancer.

Her research question was to determine the proper dose of boiling histotripsy needed for this treatment. Katie discovered that mechanical fractionation depended partially on stiffness, but also on tissue composition, structural arrangement, degree of perfusion, and water content. One of her measurement tools proved to be a potential way to confirm the effectiveness of the treatment. ■

media coverage

Spreading the word

The Foundation and the greater focused ultrasound community continued to inform millions about the technology through mainstream media including *60 Minutes*, the *Washington Post*, the *Today Show*, and the *Wall Street Journal*. The following high-impact stories reported groundbreaking focused ultrasound research in Alzheimer's disease, drug addiction, DIPG, and breast cancer. ■

2023 media reach

Focused ultrasound

+34,000 Media mentions

+3.5B People reached

Foundation

+250 Media mentions

888K People reached

13.7K Social media followers

60 Minutes

"…we're getting the therapeutic payload exactly to the area it needs to go, with a high penetration," said neurosurgeon Ali Rezai, MD. ■

Washington Post

Focused ultrasound "noninvasively gets us to parts of the brain that are inaccessible" says Noah Philip, MD. "It allows us to do something that is really unprecedented." ■

Today Show

"If a woman doesn't have to go through the surgery and the recovery and can go get a few of these ablation treatments—what a remarkable thing."

— Breast cancer clinical trial patient

Wall Street Journal

"This is just the beginning," says Carthera's Michael Canney. With focused ultrasound, "doctors can revisit many drugs that have performed poorly in the past and ask: 'Is it the drug, or just that we're not getting the drug there?'" ■

100 People to meet in 2024

Foundation chairman and former neurosurgeon, Neal F. Kassell, MD, was featured in the November 2023 *Virginia Business* list of 100 People to Meet in 2024. The fifth annual list is divided into categories, including innovators, up-and-coming entrepreneurs, nonprofit leaders, and health care executives. ■

workshops

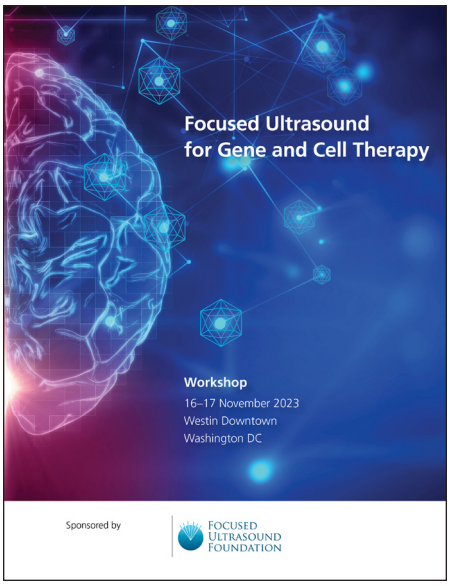
4 Workshops

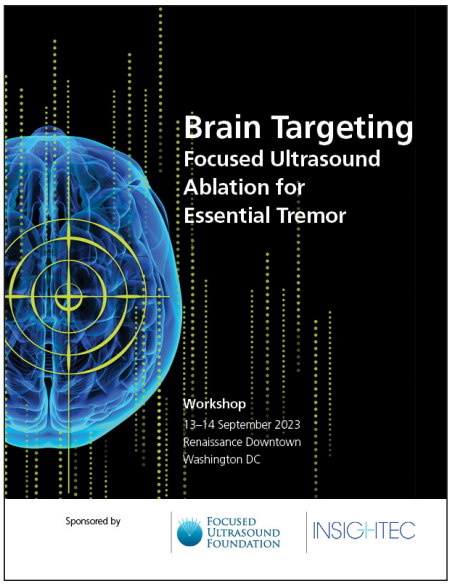
The Foundation hosted four workshops in 2023 to better understand and advance the use of focused ultrasound in the following crucial areas: **gene therapy**, **cancer immunotherapy**, **brain targeting for essential tremor**, and **Alzheimer's disease**.

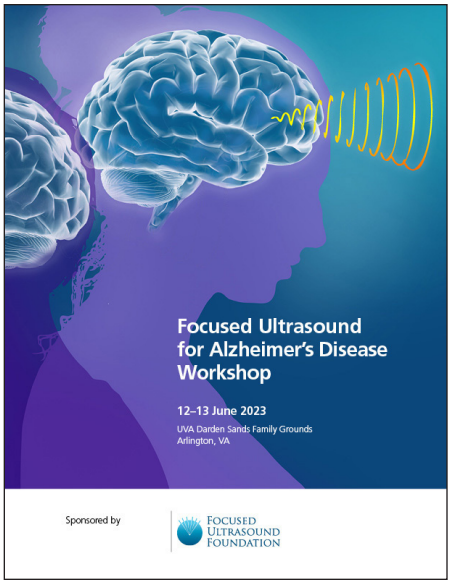
These one- and two-day workshops gather experts in the field from around the world to evaluate the use of focused ultrasound, identify knowledge gaps and current challenges, and plan the path forward. ■

3 Mini-workshops

Three mini-workshops in the areas of **sonodynamic therapy**, **veterinary care**, and **best patent practices** were also held by the Foundation in 2023. ■







Whitepapers summarizing each workshop are available on the Foundation's website.

webinars

Reaching thousands

The Foundation's "most clicked" news story of 2023 recapped our April webinar, "New Approaches in Parkinson's Disease Treatment," which reached a record of nearly 17,000 people and counting. During the webinar, experts discussed treatment options for PD and a patient shared how the technology changed his life. ■

17,000+

4 **NEW webinars**

Watch on YouTube

- **New Approaches in Parkinson's Disease Treatment**
  Rebecca Gilbert, MD, PhD | *American Parkinson Disease Association*
  Paul Fishman, MD, PhD | *University of Maryland School of Medicine*
  Michael Broad, PhD | *Focused Ultrasound Foundation*
  John Dutton | *Focused ultrasound patient*

  Views: 16,797

- **Focused Ultrasound and Breast Cancer *Current Treatments for Active Disease and Potential***
  David Brenin, MD | *University of Virginia School of Medicine*
  Natasha Sheybani, PhD | *University of Virginia*

  Views: 680

- **Women in Focused Ultrasound *Spotlight on Mentorship***
  Isabelle Aubert, PhD | *University of Toronto*
  Elisa Konofagou, PhD | *Columbia University*
  Natasha Sheybani, PhD | *University of Virginia*
  Zhen Xu, PhD | *University of Michigan*

  Views: 405

- **Sonodynamic Therapy for Brain Tumors**
  Kirk Tanner, PhD | *National Brain Tumor Society*
  Vijay Agarwal, MD | *Alpheusmedical*
  Suzanne LeBlang, MD | *Focused Ultrasound Foundation*
  Lauren Powlovich, MD, MBA | *Focused Ultrasound Foundation*
  Francesco Prada, MD | *Istituto Neurologico Carlo Besta*

  Views: 1,568

Emerging cancer treatment

The Focused Ultrasound Foundation and National Brain Tumor Society sponsored a joint webinar on sonodynamic therapy for brain tumors.

Moderated by the Chief Scientific Officer of the society, **Kirk Tanner**, PhD, the webinar focused on sonodynamic therapy as an emerging, noninvasive cancer treatment using focused ultrasound to activate agents that selectively accumulate in tumor cells and cause cell death. ■

patient spotlight

John Dutton

John, self-described as a "neurological unicorn," was diagnosed with both multiple sclerosis and Parkinson's disease. His MS was manageable, but his Parkinson's-related tremors significantly affected his life.

Conventional medications provided little to no relief, leaving him with two options: invasive deep brain stimulation or noninvasive focused ultrasound treatment.

Choosing focused ultrasound, John underwent a transformative procedure in 2022 performed by Rees Cosgrove, MD, and the team at Brigham and Women's Hospital. John says the treatment's immediate effect was nothing short of miraculous; in less than two hours, the tremors that once controlled his life ceased.

"These people saved my life. They gave me back a degree of normalcy…which, as anyone with Parkinson's knows, that's what we're looking for," says John.

Now two years tremor-free, John is enjoying life, including his passion for golf. ■

Brigham and Women's Hospital

Read John's full story on the Foundation's **website**.

regulatory

Tangible results

For focused ultrasound to continue revolutionizing therapy, sufficient evidence to support regulatory approvals worldwide remains a critical need. To facilitate this need, research and development funding from government, philanthropic sources, and industry is imperative, as well as financing for new focused ultrasound businesses. ■

Regulatory **win**

The US FDA ruled in January 2023 that appropriate patients with **essential tremor** (ET) can have focused ultrasound treatment on the second side of their brain. ET commonly affects both sides of the body and had previously only been approved for unilateral treatments. The ruling was based on data that showed a highly significant reduction in tremor following treatment of the second side.

Potential expansion

Research is also underway regarding bilateral focused ultrasound treatment for **Parkinson's disease**. ■

Capital **update**

After a slow start to 2023, investor activity, both strategic and venture, picked up in the latter half of the year. While the numbers are roughly flat year on year, the deal count is lower, demonstrating investors' desires to execute but with higher barriers than in recent years.

Carthera and Profound's successful fundings—totaling **nearly $100 million**—are evidence of continued interest in the focused ultrasound ecosystem. ■

reimbursement

Highlights

Significant advances related to reimbursement for focused ultrasound occurred in 2023, making the technology more accessible to countless patients worldwide. In the US alone, an additional 32 million people now have access to focused ultrasound coverage for ET. ■

US coverage

Essential tremor

In the US, coverage for essential tremor is provided by Medicare/Medicaid and 13 private insurers.

186.4M Previous coverage

+ 32.4M 2023 increased coverage

218.8M **2024 total coverage**

Liver tumors

A favorable determination for focused ultrasound treatment coverage was made by Medicare/Medicaid.

Parkinson's pallidotomy

In 2024, Anthem Blue Cross Blue Shield became the first to offer commercial coverage for Parkinson's pallidotomy.

Worldwide advances

There were also favorable coverage determinations for these indications in the following countries:

Essential tremor

Italy Australia

Prostate

France Switzerland

Despite these wins, there is much work to do. The Foundation would like to see access to focused ultrasound–based procedures for **all patients**. It is our hope that 2024 ushers in a new wave of gains in patient access. ■

Advocating for coverage

The **Tricare** coverage decision for US military members demonstrates the impact of the Foundation's comprehensive advocacy efforts and the tireless work of the focused ultrasound device manufacturers.

With our partners at **G2G Consulting**, we work to advocate for focused ultrasound research, clinical care, and reimbursement with congressional offices and key federal agencies. ■

"Through dozens of meetings, letters to Congress, our annual Capitol Hill 'Fly-in', and other efforts, we continually pushed for Tricare coverage of FDA-approved focused ultrasound procedures, including for ET treatment.

— Jessica Foley, PhD
Chief Scientific Officer
Focused Ultrasound Foundation

advocates

Our Council members

The Foundation's Council is a group of passionate, enthusiastic advocates who partner with us to connect the Foundation to the greater community, share our story, and promote our mission. These goodwill ambassadors work closely with the Foundation's Chairman, Board of Directors, and team to provide advice and assist with raising funds and awareness.

3 **We welcomed three new members**

- **Senator Thomas A. Daschle**
  After serving in the US House of Representatives and the Senate; Senator Daschle is now founder and CEO of the Daschle Group, where he advises clients on national issues.
- **Alicia García Herrero, PhD**
  Based in Hong Kong, García Herrero is chief economist for Asia Pacific at the French investment bank Natixis.
- **Carol Atkinson**
  An experienced philanthropist and volunteer, Atkinson is interested in the potential for focused ultrasound to improve treatment of psychiatric and neurological diseases.

> **"…friends have received focused ultrasound treatment with very good results becoming, advocates for the development and adoption of the technology.**
>
> **I'm delighted to be part of the community striving to provide a noninvasive alternative therapy that improves patient outcomes and reduces costs.**
>
> — John B. Adams, Jr.
> Council Co-chair

> **"…focused ultrasound is a new and disruptive technology, and it takes time to build the evidence.**
>
> **The Foundation is a world-class organization supporting researchers in providing that evidence for the use of sound waves in healing. It's still one of medicine's best kept secrets, but we're out to change that.**
>
> — Jane Metcalfe
> Council Co-chair

experts

Our Board members

The Foundation Board members share a passion for advancing transformational technologies and are facilitating the Foundation's efforts to shorten the time for focused ultrasound to become a global standard of care. ■

UKFUSF

"Focused ultrasound can be an effective treatment and has the potential to change the economics of healthcare in a big way. People could avoid surgery, spend less time in hospital, have less need for expensive prescription drugs, and more.

I hope to do what I can through my role in the House of Lords to provide a channel of communication about the UKFUSF and the promise of this technology."

— Lord Alastair Aberdare
Independent Trustee of UKFUSF
Member of the House of Lords

Hong Kong BOD

The FUSHK welcomed **Oliver Weisberg** to its Board of Directors in 2023. Weisberg is the CEO of Blue Pool Capital, a multi-strategy investment firm based in Hong Kong, and is passionate about advancing focused ultrasound in Asia.

New FUSF Council member Alicia García Herrero also joined the FUSHK leadership team. ■

our campaigns

Saving Time, Saving Lives

The Foundation is actively garnering support for critical initiatives in areas like neurodegenerative diseases; cancer of the brain, breast, and pancreas; and cancer immunotherapy.

$10M
Cancer Immunotherapy
Campaign goal

$10M
Neurodegenerative
Campaign goal

$4M
Veterinary
Campaign goal

$2.2M
Diffuse Midline Glioma
Campaign goal

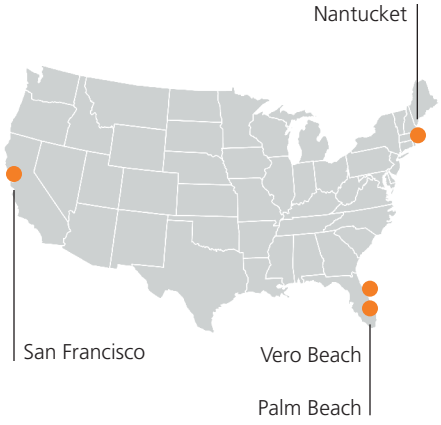
At a glance

We have secured $2.5 million of our $10 million goal to help fund research in laboratory projects and clinical trials that advance focused ultrasound's role in **immune-based treatment of cancer**. All cancers can potentially be treated with immunotherapy.

Our **2023 workshop** with the Cancer Research Institute and Parker Institute for Cancer Immunotherapy focused on evaluating the current landscape and creating a roadmap to accelerate the development of combination focused ultrasound and cancer immunotherapy treatments. With continued funding and coordinated efforts, focused ultrasound is poised to transform cancer treatment by providing a noninvasive therapy.

Awareness events

Awareness events to introduce focused ultrasound to people and highlight the Foundation's work to advance the technology were held in strategic locations.



Platinum Transparency 2023 Candid.

Charity Navigator FOUR-STAR

Did you know?

Focused ultrasound may transform treatment for more than 170 serious medical conditions ultimately improving the quality of life and longevity of millions of people around the world. But much more work remains.

Did you know?

Your investment will help desperately ill patients by making this noninvasive, life-changing treatment available in the shortest time possible.

Join the revolution, help us make the future now. ■

Ways to **give**

Please give to the Focused Ultrasound Foundation by taking advantage of one of the following options:

By Mail

Make payable to Focused Ultrasound Foundation
Mail to 1230 Cedars Court, Suite 206, Charlottesville, VA 22903

Donor-Advised Funds

Give from your donor-advised fund, by recommending to your financial institution how much and how often you want to contribute.

Gifts of Stock

Donating stock is highly tax efficient. Effectively, you can often give 20%+ more than by gifting cash.

IRA Distributions

If you are 70½ or older, you can make a charitable gift directly from your IRA as a qualified charitable distribution up to $100,000.

Gifts in Tribute

Honor friends, family members, and valued health care professionals by making gifts in honor or memory of individuals.

Online

Online at **fusfoundation.org/donate**

Contact Jessica Lukens at jlukens@fusfoundation.org or 434.326.0924 to learn how you can support our mission.

Board

Neal F. Kassell, MD
Chairman, Focused Ultrasound Foundation
Former Co-chair of Neurosurgery, University of Virginia

Scott Beardsley, PhD
Dean, University of Virginia Darden School of Business

John R. Grisham
Author

William A. Hawkins III
Senior Advisor, EW Healthcare Partners
Retired Chairman & CEO, Medtronic

Daniel P. Jordan, PhD*
President Emeritus, Thomas Jefferson Foundation

Freda Lewis-Hall, MD, DFAPA, MFPM
Former Executive VP & CMO, Pfizer, Inc.

Syaru Shirley Lin, PhD
Adjunct Professor, Chinese University of Hong Kong
Director, Goldman Sachs Asia Bank

Michael R. Lincoln
Global Business Department Chair, Cooley LLP

Michael Milken
Chairman, Milken Institute

Frederic H. Moll, MD
Chief Development Officer, Johnson & Johnson Medical Devices Companies
Co-founder, Auris Health & Intuitive Surgical

Charles "Wick" Moorman IV
Former Chairman & CEO, Norfolk Southern
Former CEO, Amtrak

Steve H. Rusckowski
Chairman, President, and CEO, Quest Diagnostics Inc.
Former CEO, Philips Healthcare

Thomas O. Ryder
Former Director, Amazon
Former Chairman & CEO, Reader's Digest

Gary Shapiro
President & CEO, Consumer Technology Association (CTA)®

* Deceased

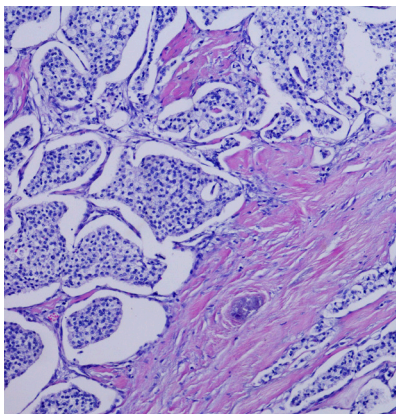
Council

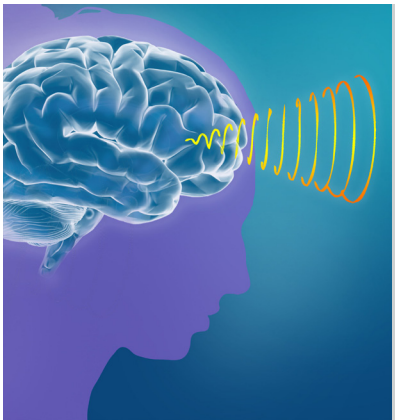
Co-chairs

John B. Adams, Jr.

Jane Metcalfe

Carol Atkinson
Jane P. Batten
Ellen H. Block
Amanda Brown
Jessica Che-yi Chao
Garry Choy, MD, MBA
Senator Thomas A. Daschle
Marguerite Davis
Norwood H. Davis, Jr.
Peter Gabriel
Alicia García Herrero, PhD
Whoopi Goldberg
David R. Goode
Molly G. Hardie
Diane Heller
Robert J. Hugin
Rowland Illing, DM, MRCS, FRCR
Mary Lou Jepsen, PhD
Dean Kamen
Ann Kingston
Jonna Hiestand Mendez
Paula F. Newcomb
Mo KC Pritzker
Thomas A. Scully
Charles H. Seilheimer, Jr.
Mary Lou Seilheimer
Nora Seilheimer
Alice H. Siegel
Lorraine Spurge
Allan C. Stam, PhD
Fredericka Stevenson
Howard H. Stevenson
Bernice Szeto
Stefan Vilsmeier
Andrew von Eschenbach, MD
Claude Wasserstein
Carolyn Yeh





FOCUSED
ULTRASOUND
FOUNDATION

1230 Cedars Court, Suite 206
Charlottesville, VA 22903
434.220.4993 main line

fusfoundation.org