



FOCUSED ULTRASOUND FOUNDATION

PROGRESS REPORT FALL 2014



Dear Friends:

We continue to see progress in the development of focused ultrasound. Important milestones have been achieved this fall – including the world’s first use of focused ultrasound for a metastatic brain tumor and the first pediatric patient treated for a painful bone tumor in North America. Last month, the Foundation hosted the most successful Symposium to date.



Neal F. Kassell, MD
CHAIRMAN

Highlights

- First metastatic brain tumor treatment with focused ultrasound
- First North American pediatric patient treated for painful bone tumor
- Patient recruitment complete for essential tremor pivotal trial
- 4th International Symposium attracts record attendance and research presentations
- Opening of Center of Excellence in London deepens interest in focused ultrasound applications for cancer
- “FORTUNE” articles put spotlight on focused ultrasound as “redefining the very meaning of surgery”



Creating Knowledge: Research Milestones

FIRST USE OF FOCUSED ULTRASOUND IN A METASTATIC BRAIN TUMOR

In a pilot study of feasibility, neurosurgeons at Swedish Neurological Institute in Seattle [thermally ablated a portion of a tumor](#) deep within the patient's brain without any complications. This early study, supported by the Cornelia Flagg Keller Memorial Fund for Brain Research, is a small but essential step towards developing non-invasive treatments for a variety of [brain tumors](#).

FIRST PEDIATRIC PATIENT IN NORTH AMERICA TREATED FOR PAINFUL BONE TUMOR

Doctors at The Hospital for Sick Children in Toronto used focused ultrasound to eliminate a [teenager's disabling pain](#) from a benign bone tumor called an [osteoid osteoma](#). This was the first treatment in a multi-center Foundation-supported study to assess focused ultrasound's ability to provide children suffering from a variety of medical conditions with scalpel-free alternatives.



PATIENT ENROLLMENT COMPLETE FOR ESSENTIAL TREMOR PIVOTAL TRIAL

The 76 patients that have been enrolled in this international pivotal safety and efficacy study will be followed for a year to assess the effect of focused ultrasound treatment on their [tremor](#). This study is the last step in generating data to support regulatory approval for this non-invasive treatment by the FDA.



Fostering Collaboration and Innovation

THE 4TH INTERNATIONAL SYMPOSIUM DRAWS LARGEST CROWD TO DATE

Attracting over 400 researchers, industry members and other stakeholders from around the world, the Symposium served as an important [forum for exchanging data and ideas](#). More than 200 scientific presentations were given on the utilization of focused ultrasound for brain disorders, cancer, pain management and other emerging applications.



CENTER OF EXCELLENCE OPENS IN LONDON TO STUDY AND TREAT CANCER

The Foundation, the Institute of Cancer Research, the Royal Marsden and Philips Healthcare [celebrated the Center's opening](#) and the start of a clinical trial for bone metastases. This public/private collaboration is a model for translating the science of focused ultrasound into cancer clinical practice.

Increasing Awareness

FORTUNE ON FOCUSED ULTRASOUND'S TRANSFORMATIVE POTENTIAL

With a worldwide reach of four million, [FORTUNE's coverage](#) has generated attention on the promise of focused ultrasound and the Foundation's catalytic role.

FOCUSED ULTRASOUND'S ROLE IN NEW HEALTH SYSTEM

[Two articles](#) by Dr. Kassell were published on the role of focused ultrasound in the evolving healthcare environment and its potential to reduce risks, lower costs and improve patient outcomes.

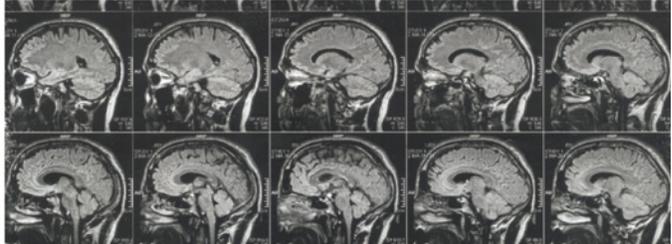
FOCUSED ULTRASOUND FEATURED BY US CHAMBER OF COMMERCE

The US Chamber of Commerce posted [two articles](#) about focused ultrasound as a new, disruptive technology and the need for big data to demonstrate value.

FORTUNE

Five ways focused ultrasound is changing medicine

by Ryan Bradley @FortuneMagazine JUN 13, 2014, 7:30 AM EDT



Overcoming Barriers

SUMMIT GENERATES ACTION PLAN FOR REIMBURSEMENT

The Foundation hosted a [summit](#) with representatives from industry and reimbursement experts to develop an integrated action plan to obtain widespread access to treat [uterine fibroids](#), [bone metastases](#) and future applications of focused ultrasound.

FOUNDATION ADVOCATES FOR PROSTATE CANCER PATIENT CHOICE BEFORE THE FDA

Scientific Director Dr. Jessica Foley spoke at two FDA advisory panel meetings to review focused ultrasound devices developed by EDAP and SonaCare for [prostate cancer](#). While the panel did not recommend approval for either device at this time, Dr. Foley is a valued liaison with the FDA, providing a voice for non-invasive treatment options.





Cultivating the Next Generation

SUMMER INTERNS CONTRIBUTE TO FOUNDATION RESEARCH

Twelve students collaborated with Foundation staff on technical, clinical and business projects, with seven interns presenting their work at the Symposium. The 2014 program was funded in part by the Claude Moore Charitable Foundation.



GLOBAL INTERN PRESENTS ABSTRACT AT SYMPOSIUM

The Global Internship program matched 12 students with academic researchers and industry mentors at international sites. Jemma Brown, an intern at the Institute of Cancer Research in London was awarded travel support to share her work on imaging bone and soft tissue.



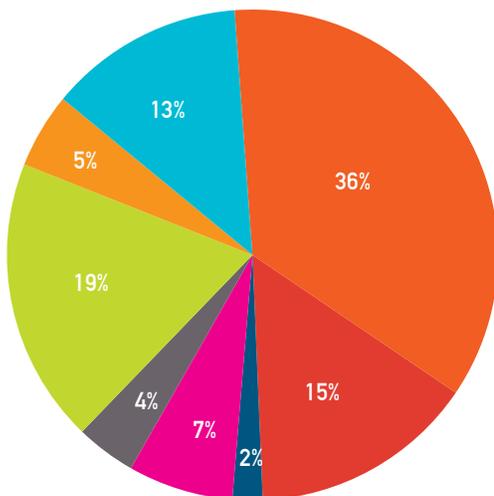
Finances

CENTER OF EXCELLENCE RECEIVES \$1.5 MILLION

As a result of the Foundation's efforts, the UVA Focused Ultrasound Center received funds from the Commonwealth of Virginia to support research in movement disorders and cancers.

ALLOCATION OF FUNDS

2014 YEAR TO DATE: \$3,019,738



RESEARCH	\$1,081,817
DEVELOPMENT	\$445,754
CENTERS OF EXCELLENCE	\$69,503
REGULATORY	\$205,734
REIMBURSEMENT/REGISTRY/FIBROID RELIEF	\$124,537
COMMUNICATIONS	\$563,498
SCHOLARS PROGRAM/FELLOWSHIPS	\$148,766
CRN/SYMP/MEETINGS	\$380,130

MAKE A DIFFERENCE

The Foundation needs \$6 million to fund programs planned through 2015. With your generous support, we can continue to make a difference by funding promising research, forging collaboration, increasing awareness and overcoming barriers.

GIVE NOW AT

www.fusfoundation.org

If you would like additional information or want to discuss how you can support our mission, please contact Mike Cashman, Director of Development, at 434.326.9831 or mcashman@fusfoundation.org.

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