

June 1, 2017

To: Nevada Athletic Commission

From: Cleveland Clinic Lou Ruvo Center for Brain Health

Re: Professional Fighters Brain Health Study

We are pleased to report to the Nevada Athletic Commission that the Professional Fighters Brain Health Study (PFBHS), which is designed to monitor brain health of fighters and lead to better understanding of the long term effects of repetitive head trauma, has successfully enrolled over 750 participants, mostly active male fighters. The most important information we will now gain is by following the individuals in the study on a yearly basis over the next 5-10 years or as long as possible. However, we are still seeking **retired** fighters (with at least ten professional fights) and **women** fighters (either active or retired) to enter the study; each participant will receive an MRI brain scan, blood testing (including those needed for licensure), and assessment of their memory and reaction time. We would particularly like to encourage retired fighters, *whether they are having any symptoms or not*, to participate.

Information or answers to specific questions about the study can be obtained by calling (702) 675-5237 or by email at fightforbrainhealth@ccf.org.

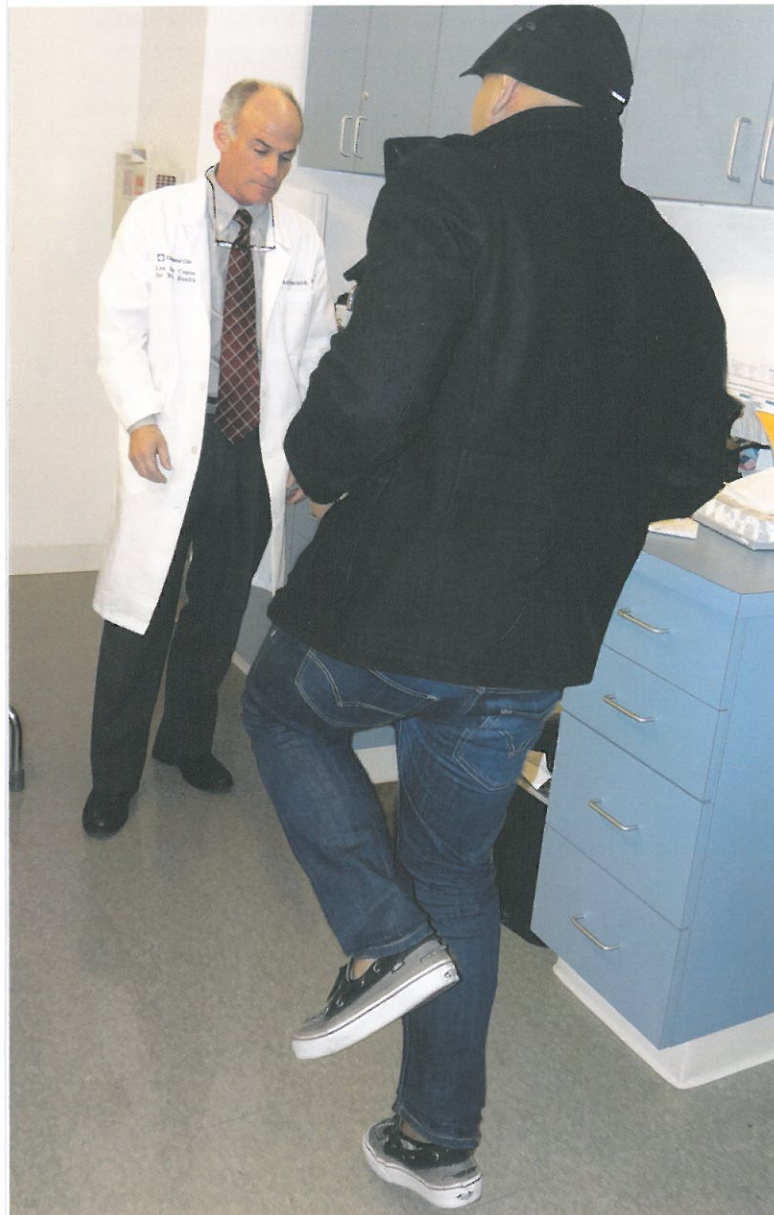
Thank you.

Charles Bernick, MD, MPH

Cleveland Clinic Lou Ruvo Center for Brain Health

Fighting for Brain Health

The Professional Fighters
Brain Health Study



Fighting for Brain Health

Cleveland Clinic Lou Ruvo Center for Brain Health in Las Vegas, Nevada, is recruiting both active and retired professional fighters (boxers and MMA) for a study that will help determine whether MRI or other tests can detect subtle changes in brain health due to repeated blows to the head. Researchers hope to identify if and when changes occur that may result in impaired thinking and function. Together we can improve brain health awareness within the fighting community.



The Study

Fighters will be asked to participate in the study once a year for at least four years so that any changes to their brain function can be noted and monitored.

Each year, the fighter's visit will last about two hours. Study participants will:

1. Answer basic questions about their background, medical history, and sports experience.
2. Undergo a noninvasive and painless MRI scan of the brain and a neurological examination, including measurement of balance and eye movement.
3. Participate in brief computerized and verbal tests to measure memory and other aspects of mental functioning.
4. Have a blood test for genes and other tests required for licensing, including HIV and Hepatitis B and C.

There is no cost for participation. Participants will be compensated for their time and travel expenses once enrolled in the study.

Participants may submit their MRI reports and blood tests results to the Nevada Athletic Commission as part of their application for licensure in Nevada.

Participants must be:

1. Age 18 or older.
2. Licensed or seeking licensure in the state of Nevada for professional fighting (unarmed combat), including boxing, mixed martial arts and muay thai
OR
retired professional fighters with a career including at least 10 professional matches.
3. Able to read and speak English.

Frequently Asked Questions

Why should I participate?

In some athletes recurrent blows to the head can result in brain injury causing chronic traumatic encephalopathy (CTE), Alzheimer's disease, or parkinsonism. Depression, mood disorders and other neurological findings can occur in athletes at relatively young ages. Given the advances made in studying the brain, such as MRI scanning, we may have the ability to determine who is at greatest risk to develop permanent brain injury and detect it at its earliest stages. Your participation in the study will help us answer these important questions and hopefully lead to improved safety in your sport.

How often should I be tested?

You will undergo a study visit once a year. The most important information that will be gained from this study will come from evaluating individuals over several years to see if and how brain changes occur. Though you are able to stop your participation in the study at any time, we encourage participants to have yearly visits.

Who will have access to my information?

Only the study team will have access to information obtained in the study — all findings are strictly confidential and will not be released to any other person or agency without your written permission.

The Professional Fighters Brain Health Study is supported in part by donations from:

Arthur Spector
Dan Park
Golden Boy Promotions
Steven DeLonga
The Dream Fund at UCLA
The Lincy Foundation
Top Rank, Inc.
Ultimate Fighting Championship
Viacom's Bellator MMA and GLORY Kickboxing

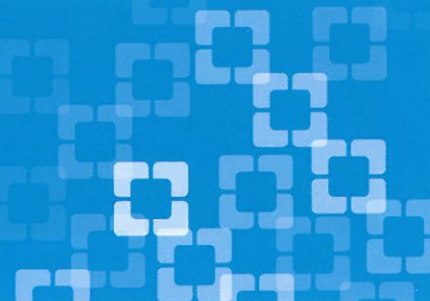
To discuss opportunities to support this study, please contact us at 702.331.7052.



Confidentiality

Any abnormal findings will be discussed privately with the fighter. No information will be released to any other person, agency or to the Nevada Athletic Commission without the participant's written permission.

If the MRI shows an abnormality, we will discuss whether the fighter would like us to forward the information to his or her personal physician. If we believe the finding puts the athlete at risk for continued participation in the sport, we will inform the participant and it will be his or her responsibility to notify the licensing agency.



About Cleveland Clinic Lou Ruvo Center for Brain Health

Cleveland Clinic Lou Ruvo Center for Brain Health provides state-of-the-art care for cognitive disorders and for the family members of those who suffer from them. The physicians and staff at the Lou Ruvo Center for Brain Health are devoted to excellent patient care, support of caregivers and development of new treatments in clinical trials. The Center offers a patient-focused multidisciplinary team approach to diagnosis and treatment, offering patients a complete continuum of care and integrated research opportunities. The facility, designed by Frank Gehry, includes clinical resources, advanced brain imaging, physical therapy, research and the Keep Memory Alive Event Center. For more information, please visit clevelandclinic.org/brainhealth.

About Cleveland Clinic

Cleveland Clinic is a nonprofit, multispecialty academic medical center consistently ranked among the top five hospitals in America by *U.S. News & World Report*. About 2,800 full-time salaried physicians and researchers and 11,000 nurses represent 120 medical specialties and subspecialties. Founded in 1921, Cleveland Clinic Health System now includes a main campus near downtown Cleveland, eight community hospitals and 18 Family Health Centers in Northeast Ohio, Cleveland Clinic Florida, the Lou Ruvo Center for Brain Health in Las Vegas, Cleveland Clinic Canada, and opening in 2014, Cleveland Clinic Abu Dhabi. Clevelandclinic.org

Contact Us

For more information or to participate, contact Triny Cooper at 702.675.5237 or email BrainHealth@ccf.org



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Below is a link for the
Cleveland Clinic Fighter Study

<http://clevelandclinic.org/fighterstudy>