

The International Concussion and Head Injury Research Foundation (ICHIRF) is part of a multi-centred, multi-sport, longitudinal study on retired athletes and is the largest research project of its kind in the world.

International research is currently focused on two different aspects of concussion – the immediate diagnosis of concussion (and the return to sport following this), and the long-term effects that may only become apparent twenty or more years later (the focus of the ICHIRF project).

ICHIRF's objectives are to establish if participation in impact sports can increase the risk of altered brain function in later life, and if concussion in sport can result in the early onset of confusion, depression and memory loss. The only way to establish this is to compare a group of athletes who have suffered at least one concussion with a similar group who have never had concussion (the control group). The recruitment of volunteers who have never had concussion is therefore an essential part of the ICHIRF project.

For the first 12 months, ICHIRF concentrated its research on retired jockeys, both amateur and professional, but the project has now been expanded to include athletes from a wide variety of other impact sports.

There are two topics of current interest to the ICHIRF team-

- a) The unexplained increase in concussion rates seen in female riders (approximately 3.6 times higher than the rates seen in male riders.)
- b) The genetic fingerprint that determines which athletes are resistant to changes in brain function following impact sports.

ICHIRF is uniquely placed to research both these areas because-

- a) Unlike the other sports taking part in this project, horse racing involves large numbers of female competitors and it is the only impact sport where men and women regularly compete side by side on equal terms.
- b) Horse racing has the highest rates of concussion recorded in any sport and yet retired jockeys do not appear to be more at risk of deteriorating brain function in later life. It is therefore important to establish what scientific proof is available to support or disprove this impression, and to see if the same applies to other impact sports

ICHIRF collaborates, and shares its findings, with similar research projects in Australia, Europe and North America – the Florey Institute in Melbourne, the Sports Surgery Clinic in Dublin, the Swiss Concussion Centre in Zurich and the Centre for the Study of Retired Athletes at the University of North Carolina in Chapel Hill, USA. These centres undertaking research on Australian Rules Football, Rugby Union, Rugby League, Football (Soccer), American Football and Ice Hockey.

Anyone wishing to participate in the ICHIRF study should visit the website at – www.ichirf.org

Anyone willing to offer financial support should contact ICHIRF directly at - pippa@ichirf.org