



# Bone Research Society (BRS) Wednesday 29<sup>th</sup> June 2016

As part of the BRS Annual Meeting, taking place in Liverpool, there is an exciting opportunity for eight local schools to take part in a series of hands-on workshops and demonstrations, to learn more about bones, their structure and movement. These sessions will be led by some of the world's leading researchers in this area.

Venue: School of Sport and Exercise Sciences, Tom Reilly Building, Liverpool John Moores University, Byrom Street Liverpool L33AF.

Time	Activity
12:30	Taxi collects from school (4 pupils + 1 staff)
12:45 – 13:00	Arrive at LIMU
12:45 – 13:15	Buffet lunch provided
13:20 – 13:25	Welcome to The School of Sport and Exercise Sciences at LIMU
13:30 – 13:55	Guest Lecture; Bones – The Basics
14:00 – 15:00	The Science of Bones Workshops (see further information below)
15:10	Depart – taxi provided back to school

### Schools hands on workshops and demonstrations. (14:00-15:00)

Two groups (8 pupils + 2 staff) at each workshop at any one time. Groups will visit all four workshops.

# 1. Al Bond (Liverpool): Funny Bones – Anatomy of the skeleton

We will have some bones here for you to touch and compare. Why do we need strong bones? Which is the biggest bone? Which bone gets broken the most?

## 2. Ali Gartland (Sheffield): What is bone made of?

How can bones be very strong but light enough to let us run and jump? Why can you see bones easily in X rays, but not skin or muscles? Why do babies have bendy bones? Why do bones get brittle and easily broken if you don't have the right food?

## 3. Gabor Barton (Liverpool) - Motion capture of skeletal movement

Video cameras can follow human movements like kicking, walking and jumping. How can we measure the forces in a human leg? Can we work out what is the best shoe to avoid hurting our ankles or knees?

#### 4. Emma Morris (Oxford) – Fatty Bones

The aim of this activity is learn about the structure and composition of the human skeleton. In particular, we will highlight the consequences of increased fat in the bone and promote an awareness of the importance of exercise on bone health.