



December 2015

The University's Mellanby Centre for Bone Research held its annual meeting in December and over 100 people attended this. The meeting demonstrated the strength of bone research in Sheffield, from bench to bedside.

The Mellanby Centre for Bone Research was set up within the University of Sheffield 7 years ago and we held the annual research day at INOX Dine in December 2015. Richard Eastell is the Director of the Centre and he opened the meeting by explaining the strategic importance of the Centre, especially in the light of the Tooke Report on Medicine and Science. The Centre has been the basis of grant success, including the recently awarded Centre for the Integration of Research into Musculoskeletal Ageing (CIMA). The opening speaker was Professor Dominique Heymann, (Oncology and Metabolism, TUOS) and he explained how 90% bone tumours arise in children and how they arose and what might be used to treat them. Dr Allie Gartland (Oncology and Metabolism, TUOS) explained how low oxygen tension (hypoxia) promotes tumour growth and that a key part of this pathway is the enzyme, lysyl oxidase. Professor Mitch Dowsett (The Institute of Cancer Research, London) described the importance of circulating oestradiol levels for the development of breast cancer and the major advances in treatment that have resulted from the development of aromatase inhibitors, the enzyme that produces oestradiol. Dr Fadil Hannan (Department of Clinical Biochemistry and Metabolic Medicine, Liverpool) explained how there are now more than 200 mutations of the calcium sensing receptor described and these help explain the development of disorders of calcium metabolism, such as familial benign hypercalcaemia and autosomal dominant hypocalcaemia. Professor Graham Williams (Imperial, London) spoke about the role of the alpha form of the thyroid hormone receptor and its importance in mediating the effects of thyroid hormone on the growing skeleton.

We held snap poster presentations for the second time as these are a popular format. They were oneminute presentations on why someone should attend the poster. We awarded a prize to Louis Metcalf for the best snap presentation. The best poster presentation was won by Silvia Marino. The best oral presentation was won by Ning Wang; he described how purinogenic signalling might mediate the development of bone metastases in prostate cancer.



INOX Dine provided an excellent venue for our meeting, both the lecture facilities and the poster viewing area with its view over the centre of Sheffield.