

Long live bone

On 16th April 2016, the Euroclast team in Amsterdam participated in the Vrije University Amsterdam anniversary event “Knowledge in movement”. Euroclast ESR Yixuan Cao, together with Euroclast member and supervisor Teun de Vries and with senior technician Ineke Jansen, presented “Lang Leve het Bot!” (Long live bone). This interactive workshop attracted more than 80 visitors, including alumni from the university, current students, patients with bone diseases, and people with an interest in bone research. The workshop was held at the Department of Oral Cell Biology on the 11th floor of the ACTA building.



The presenters in the Atrium of the ACTA building in front of the announcement.

From left to right: Ineke Jansen, Yixuan Cao and Teun de Vries

Teun gave a presentation on bone structure and osteoclasts before introducing the Euroclast consortium to the audience.

Ineke explained the material properties of bone by demonstrating how a decalcified bone is soft and easily bends, unlike a normal calcified bone which is hard and stiff. She then showed movies of osteoclasts, illustrating how these dynamic cells move over the bone surface and undergo fusion and fission, constantly changing shape.



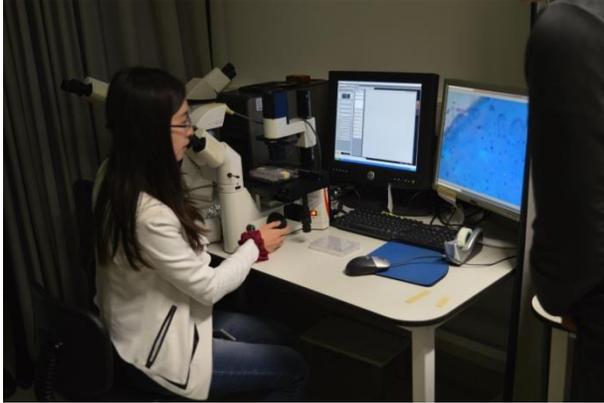
Teun giving a lesson in geography: the Euroclast consortium has 9 partners in 6 countries!



Ineke explains how osteoclasts are present in all bone tissues and how they help maintain a healthy bone tissue.

The image in the background is of jaw bone containing teeth, tissues that are studied extensively in the Department of Oral Cell Biology.

Yixuan showed how microscopy can be used to image osteoclasts. She explained that special staining techniques allow researchers to examine the resorption pits that osteoclasts make when they degrade bone. The audience was invited to join her at the light and fluorescent microscope she uses in her work and was instructed in how to observe stained osteoclasts and bone resorption pits.



Yixuan at the microscope demonstrating how researchers can study the behaviour of osteoclasts on bone or dentine surfaces.

To finish, the audience was given the opportunity to examine a range of histological sections of bone tissue by microscopy.

The workshop was very well received by all. The audience enjoyed hearing about the working-life of the scientists and learning basic facts about osteoclasts and bone tissue, while the presenters enjoyed the opportunity to talk about the Euroclast consortium and its work to such an interested general audience.

Definitely an event to repeat in the future!