ITO BONE HISTOMORPHOMETRY INSTITUTE
Bone histomorphometry is the only method to evaluate all of resorption, osteoid formation and mineralization of the bone.

Bone histomorphometric analysis is the only method to analyze the dynamic indices, including mineral apposition rate, bone formation rate, mineralization lag time and activation frequency, which are obtained by labeling of the bone followed by tetracycline administration. In addition, the volume of woven or lamellar texture of bone and fibrous tissue, bone surface and number of low ash level of the bone cells, such as osteoclasts, osteoblasts and osteocytes are obtained as a numerical value at the same time. If you need the results of histomorphometric measurement, we will prepare the characteristic findings and sites of typical bone as the excellent photo techniques and schemas. These are widely used in many papers published by high ranked journals and at the presentation in the international scientific meetings. Recently, three dimensional structure of bone is analyzed usually by the spread of Micro-CT scanning. However, it is the way of our thinking to provide these to all of basic and clinical researchers well and we believe that informing all of the results obtained from bone specimens is our mission. Thus far we have used these procedures successfully, and would be very happy to assist your organization in your research using bone histomorphometry.

Company Feature
Researchers of the institution, including universities or colleges of Medicine and Dentistry nationwide related to bone primarily, pharmaceutical companies for new drug development. We wish to support you through the preparation of specimen and bone histomorphometry mentioned above for the purpose of all of researchers.

Business

- Produce of the undecalcified specimen.
  The undecalcified polished specimen and undecalcified sliced specimen.

- Bone Histomorphometry
  - Cancellous bone morphometry
  - Cortical bone morphometry and joint-related measurement

- Photography-related
  - Tissue photography
  - Bone image reporting

- Acceptance of trainees
  - How to interpret the measurement results and perspective of bone tissue
Production of specimen

Villanueva Bone Stain

Undecalcified sliced process

Undecalcified ground process

Bone Histomorphometry

Using both undecalcified polished and undecalcified sliced specimens, I make the measurement of parameters related to bone resorption, bone formation and bone structure through bone morphometry.

● Type of measurement possible in the cancellous bone
  - Cancellous bone morphometry
  - Osteoblast-Type Classification of measurement
  - Bone-cell (including osteocyte) measurement, etc

● Type of measurement possible in the cortical bone
  - Cortical bone morphometry (transverse sections morphometry)
  - Measurement of newly formed bone
  - Bone-cell (including osteocyte) measurement etc

● Type of measurement possible in the articular cartilage
  - Joint cartilage width measurement
  - Growth cartilage width measurement
Photography-related

It is possible that the various organizations can be observed by changing the light source.

- **Natural light**
  - Osteoblast
  - Osteoclast
  - Osteocyte
  - Osteoid surface, osteoid width
  - Bone volume, etc

- **Polarized light**
  - Lamellar bone
  - Woven bone
  - Scalloped cement line
  - Smooth cement line
  - Minimodeling, etc

- **Fluorescent light**
  - Single or double labeled surface
  - Label width
  - Newly formed bone
  - Hypomineralized area
  - Micropetrosis, etc

- **Corporate Profile**
  - **Company name**: Ito Bone Histomorphometry Institute Co, Ltd
  - **address**: Nanokamachi 1824, Akiha-ward, Niigata City,
  Niigata pref, Japan
  - **Representative**: Akemi Ito
  - **Establishment**: August, 2006

- **A member of Society**
  - American Society for Bone and Mineral Research (ASBMR)
  - Japanese Society for Bone Morphometry
  - The Japanese Society for Bone and Mineral Research

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