

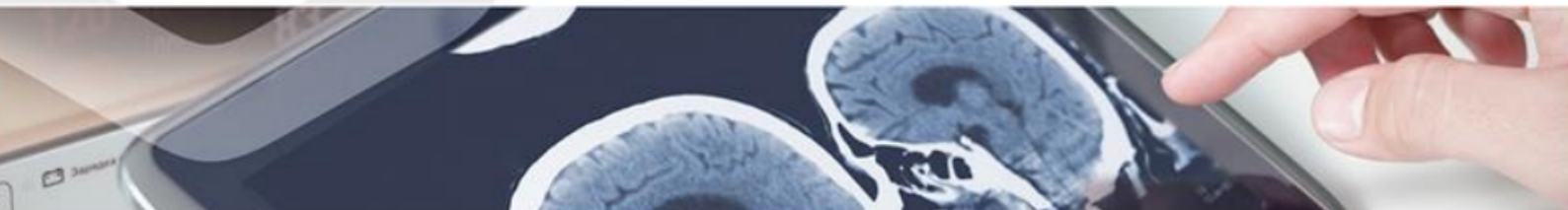


Research tool

DETACHABLE ANATOMICAL MODEL OF ANKLE AND TARSUS FOR TEACHING

3D scan and printing files have been created that independently reproduce the bones of the distal third of the tibia and fibula, the tarsal bones (7), the five metatarsals, and the bones of the toes. Each piece has been individually designed and printed, allowing it to articulate with the others to form a complete ankle and foot model of a healthy subject.

Oficina de
**TRANSFERENCIA
DE TECNOLOGÍA**
Sistema Sanitario Público de Andalucía



Description

The detachable anatomical model reproduces all bony elements from the distal portion of the tibia and fibula to the phalanges of the toes.

- Each bone is individualized and numbered, facilitating the identification and study of congruent articular surfaces.
- The connections between bones are made using small pegs, allowing for easy assembly and disassembly while ensuring proper articulation.
- The model can be scaled in size, and the usefulness of a 1:2 scale has been verified to improve visualization of the smaller bones.
- Bone groups are presented in different colors to enhance the understanding of anatomical and functional relationships (Chopart's and Lisfranc's joints).
- The phalanges of each toe are designed in single blocks (one two-phalanx block and four three-phalanx blocks), making them easier to handle and more robust.

This teaching resource enables students to engage in practical and dynamic learning of ankle and foot anatomy, offering an interactive model that faithfully reproduces the bony structures and their relationships.



Advantages

1. Facilitates practical teaching of ankle and foot anatomy through a manipulable, detachable, and educational model.
2. Faithfully reproduces the bony anatomy, allowing the study of both individual and functional joints.
3. Greater durability, thanks to the use of resistant materials that withstand repeated assembly and disassembly.
4. Enhances visual understanding through the use of different colors for bone groups.
5. Flexible for study, as it can be scaled and adapted to different educational needs.



Intellectually/Industry Property

It is protected by an Intellectual Property Registry (RPISC2310245667042).



Aims

Collaboration is sought for the use of the model in teaching and training, as well as for its large-scale production and integration into anatomy education programs.



Classification

Category: 3D Anatomical Model

Área: University Teaching / Health Sciences / Anatomy