

# UserGuide / CropDicom

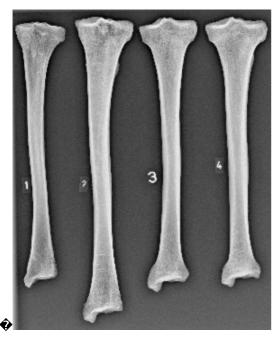
# User Guide: CropDicomTool

last update: 2011/4/20

- The idea of the CropDicomTool is to prepare the images for the harris lines tool (HL tool)
- Each input image for the HL tool has to be in the dicom format and contain one single bone, which is vertically oriented
- · the buttons on the right hand side are used from top to down

#### (1) open dicom or tiff image

- · black background needed, otherwise 'invert' the image
- currently only tiff and dicom images can be loaded (other formats upon request Contact)



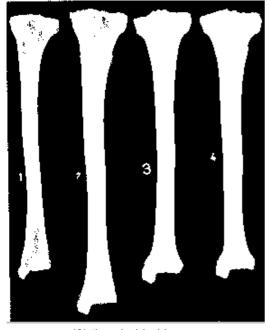


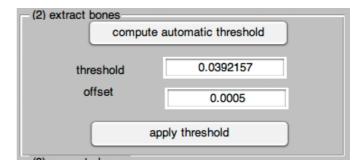
(1) open file

opening panel

## (2) extract bones

- · threshold the input image such that you see your bones in white on the right image
- calculate the automatic threshold (with button)
- tune / adjust the calculated threshold with the offset (play with negative or positive small offsets)
- every bone should be clearly separated from other things, i.e., no connecting white line should be visible between the bones
- · small numbers or box artefacts should also be separated, they can be removed later



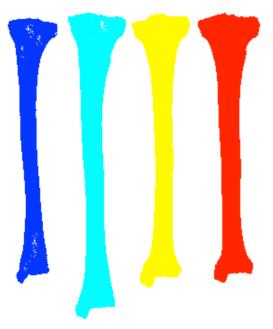


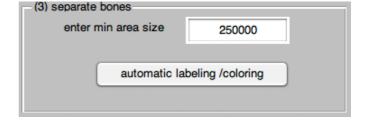
(2) thresholded bones

threshold panel

#### (3) separate bones

- · one color per bone
- mark each single bone with a separate color (play with the input field to increase or decrease the number)
- e.g, by increasing the value (min area size), small numbers or similar things can be removed





(3) labeled bones (one color per bone)

labeling panel

## (4) save single bones

- · one dcm-file per bone
- · each colored bone is extracted and saved
- · you have to provide a file name for every bone
- before saving, each image is displayed such that you can give the correct name to it
- · artifacts are also saved, but they can be manually deleted after the saving procedure
- the bone should be oriented vertically (if this is not the case, it needs to be rotated in another tool, rotation is currently not provided in the CropDicomTool)