The Common Coordinate Framework Registration User Interface (CCF RUI)

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Setting the Stage

• HuBMAP by NIH
• Goal: “Google Maps” of human body at single-cell resolution
• Our lab contributes the Registration User Interface (RUI)
  • v1.5 deployed in 03/2021
  • v0.6 deployed in 2019

Warning: graphical images (human kidney) coming up!

https://hubmapconsortium.github.io/ccf-ui/rui/
The Meat of the Matter

• Documenting tissue extraction sites is non-trivial
• Photos of reference organs (if available) on cutting boards with spatial markers
• We used the Visible Human male, left kidney (100 mm high, 60 mm wide, 40 mm deep)
Discussion

• 2D Desktop validated as solution for gross-anatomical registration

• Precision of the mouse as an input device

• Separate manipulation of position and rotation

• 45 tissue blocks registered as of 03/2021
  • 15 left kidney
  • 15 spleen
  • 11 right kidney
  • 4 large intestine

EUI: https://hubmap-ccf-ui.netlify.app/

RUI: https://hubmapconsortium.github.io/ccf-ui/rui/
Q&A