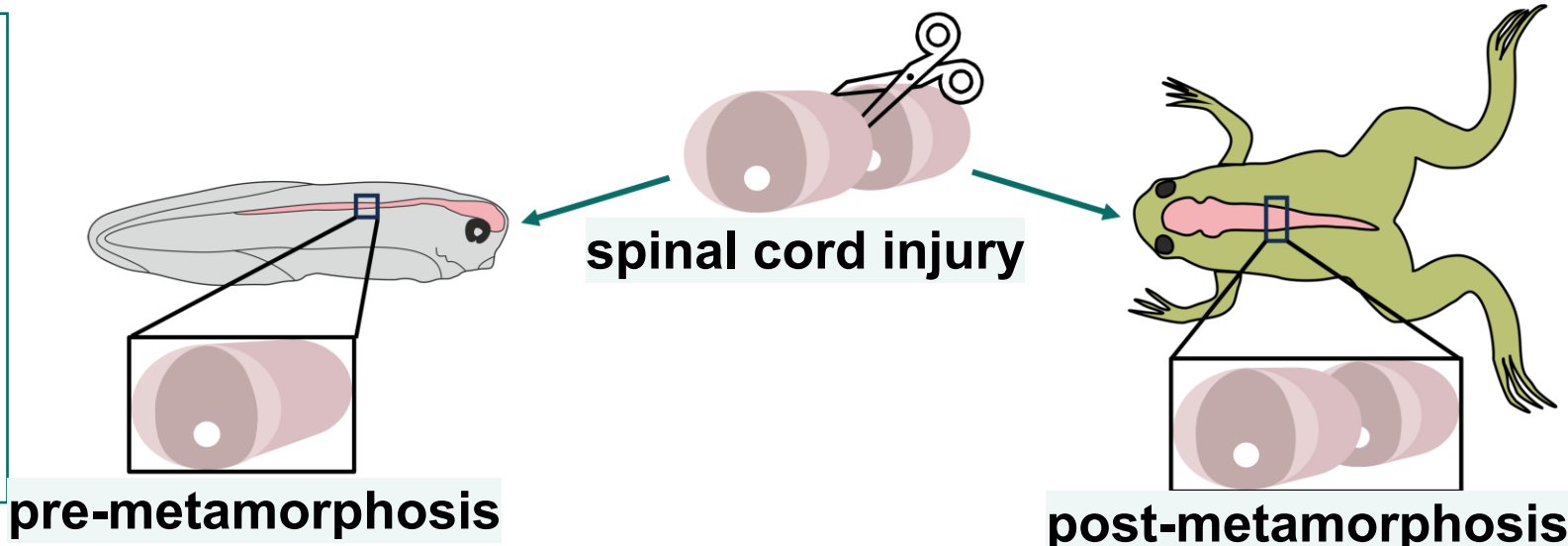
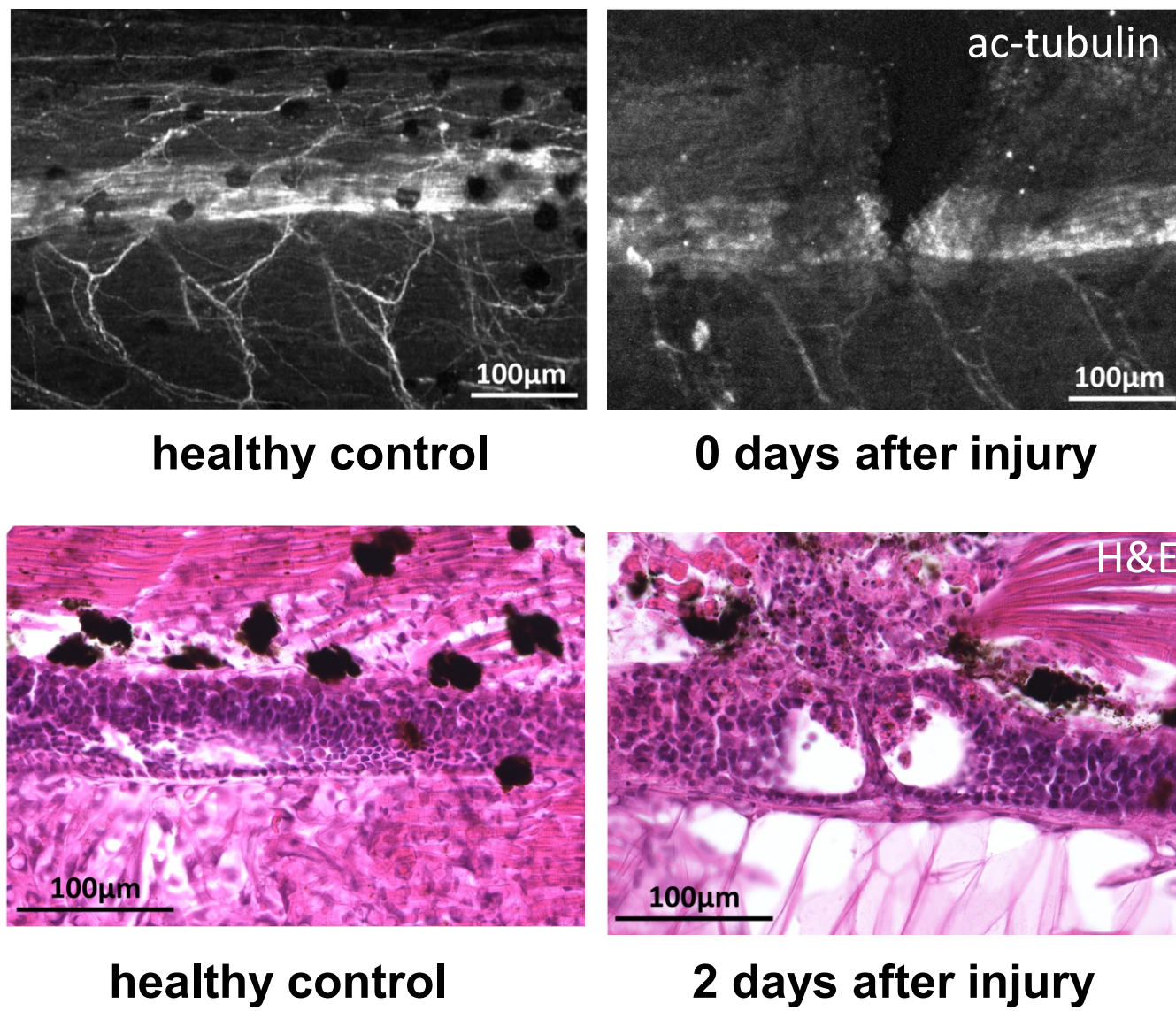
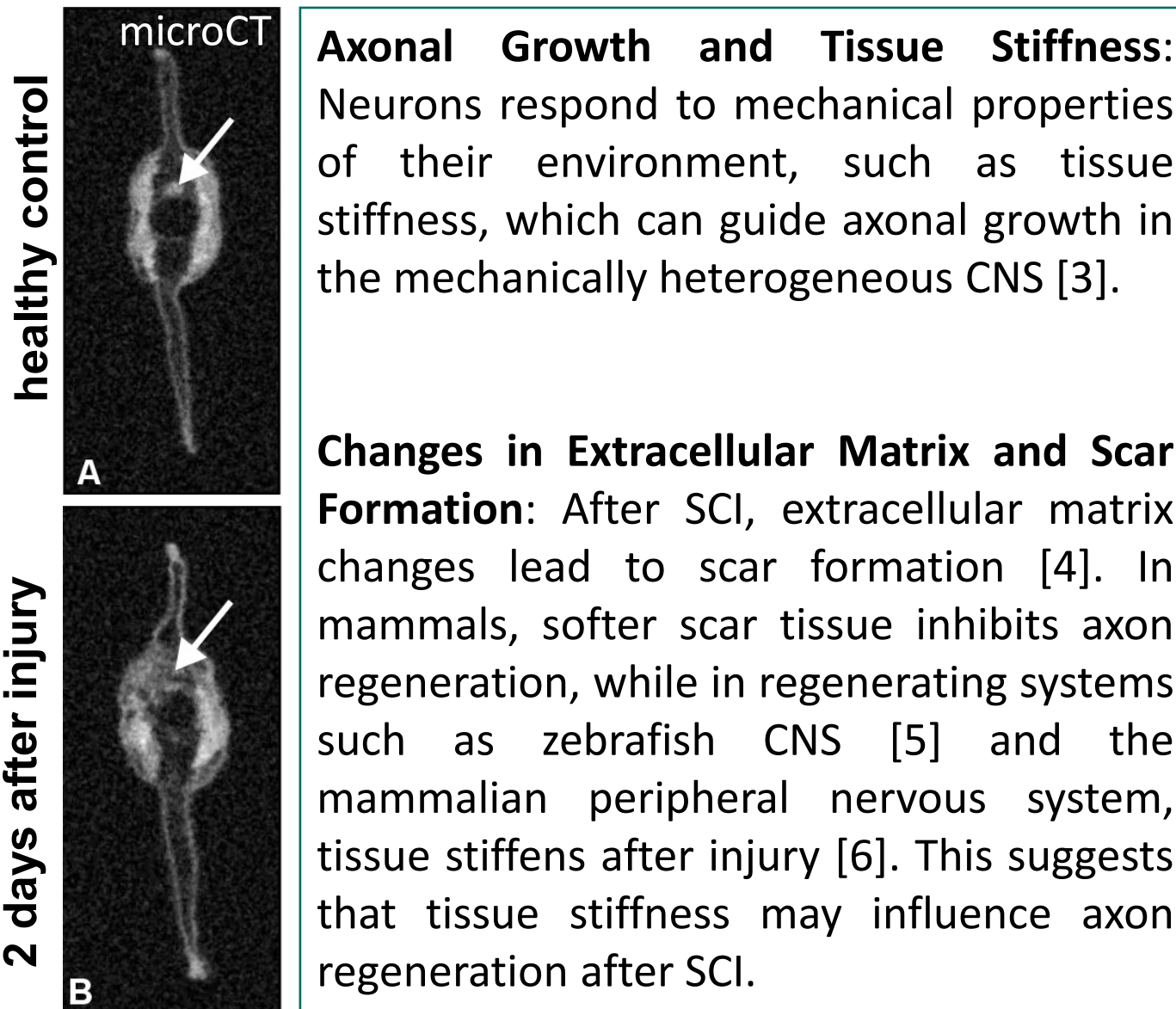


## XENOPUS AS A MODEL SYSTEM

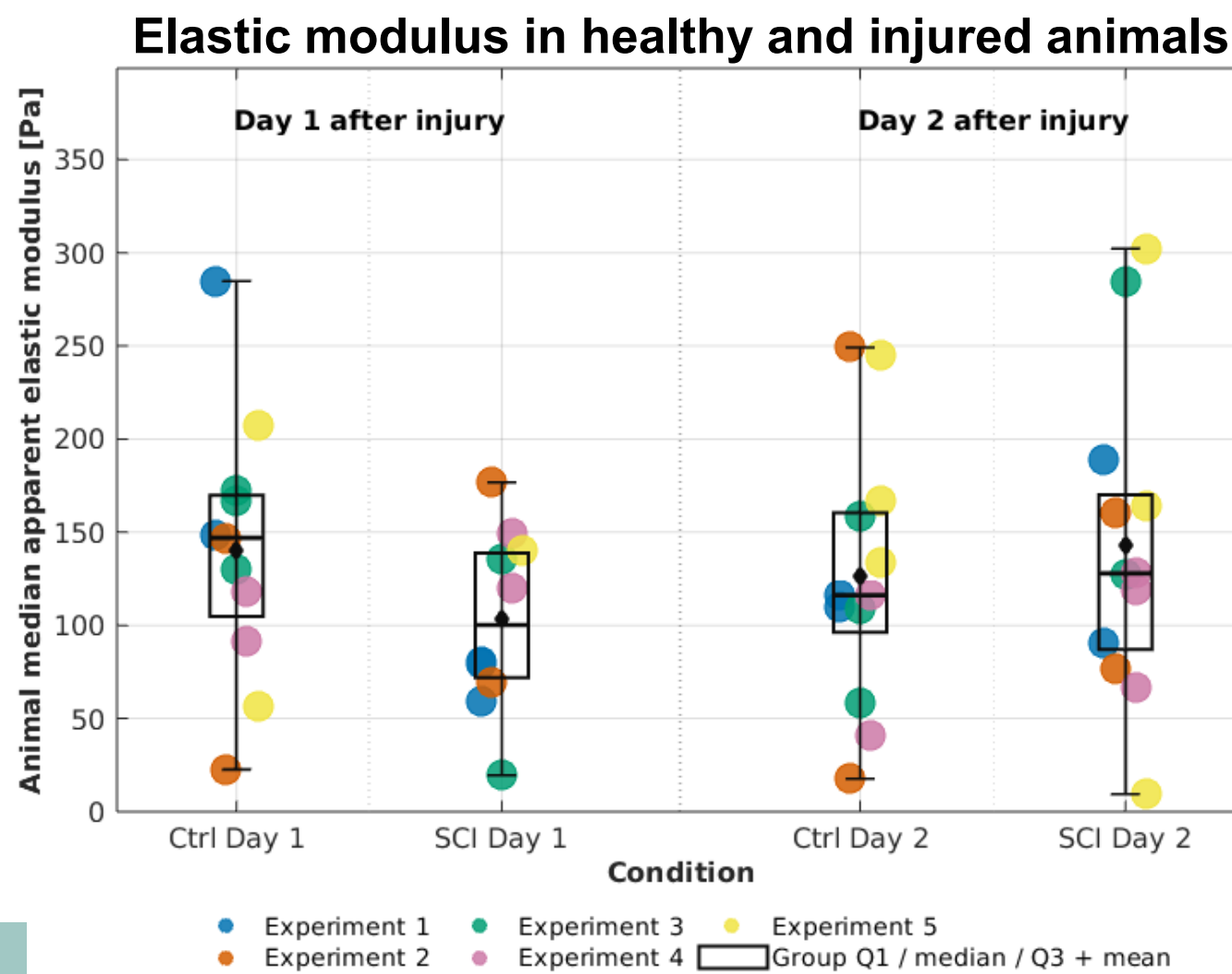
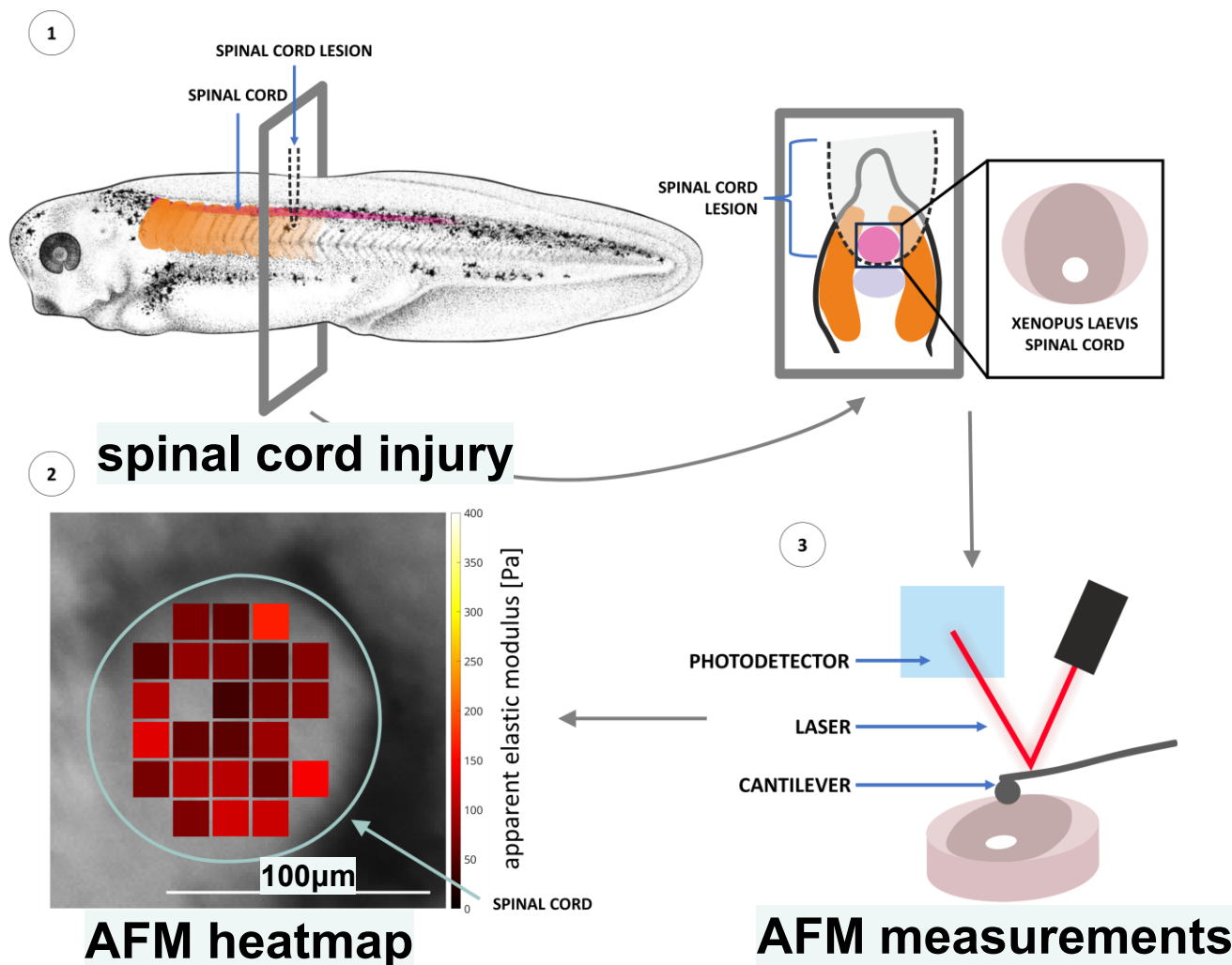
**Regeneration in *Xenopus laevis*:** While the mammalian spinal cord cannot regenerate after injury, the spinal cord of the African clawed frog, *Xenopus laevis*, can regenerate during early life stages, pre-metamorphosis, but loses this ability post-metamorphosis, after transitioning into its adult form.



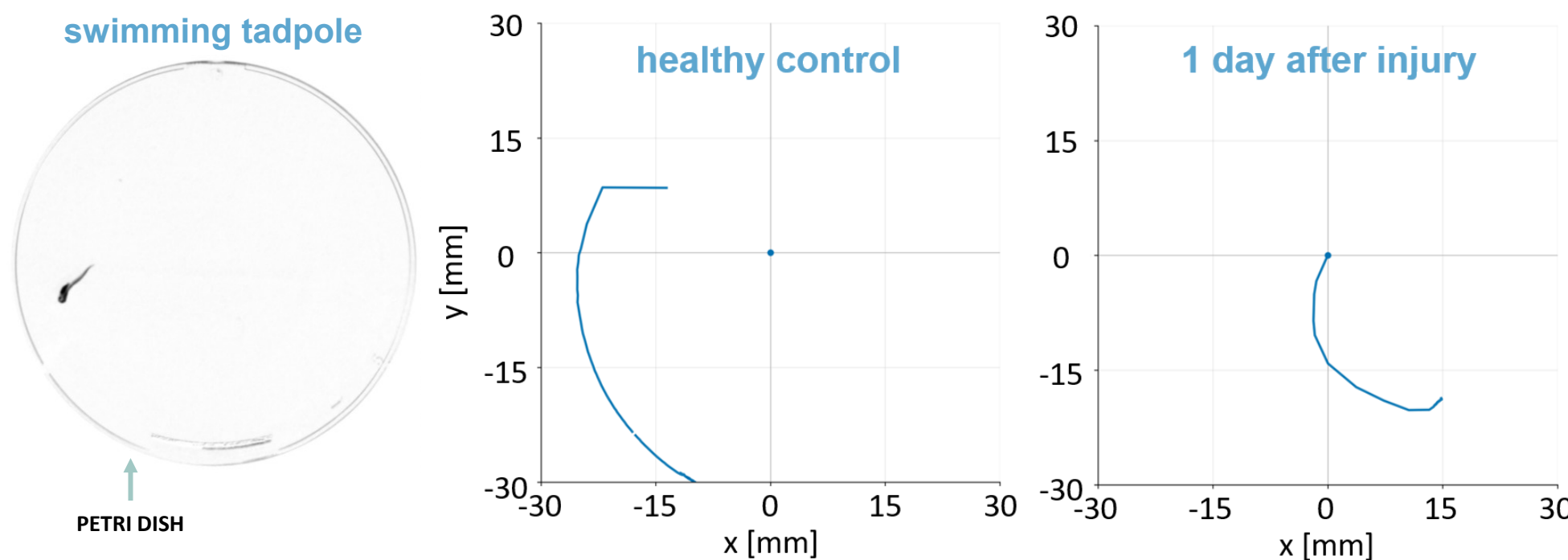
## MECHANICS AND REGENERATION



## MECHANICAL MEASUREMENTS



To measure the stiffness of the spinal cord lesion, we (1) section the spinal cord (2) perform atomic force microscopy (AFM) measurements. (3) The result is a heatmap showing the stiffness of the different regions of the tissue.



**Results:** We measured the apparent elastic modulus in tadpoles with SCI and uninjured controls at one and two days post-injury. Preliminary data show no clear trend in stiffness on the second day following injury.