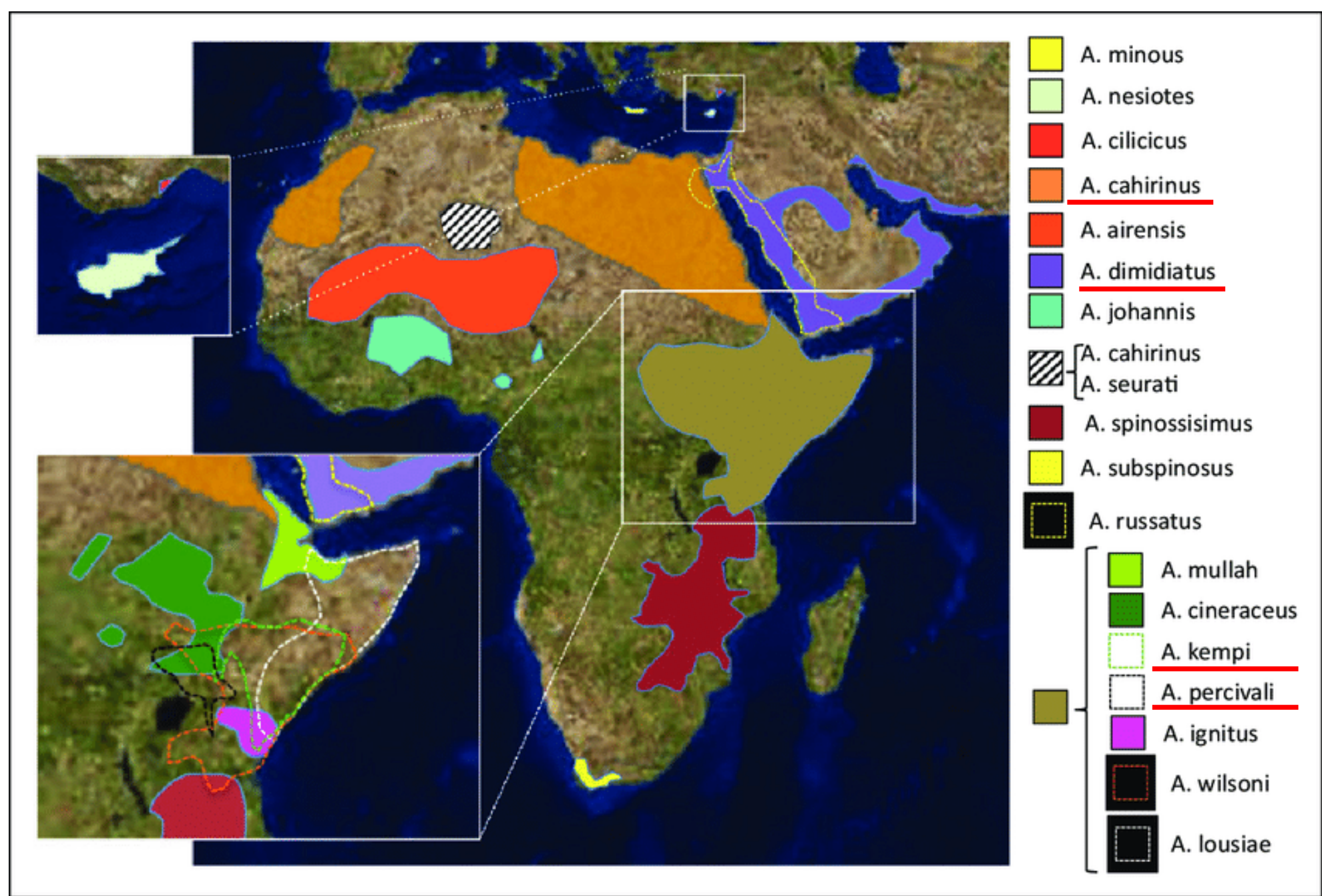


Acomys cahirinus - модельный объект для изучения регенерации



Birmingham Nature Centre - Arabian Spiny Mouse - Andy Mabbett.jpg

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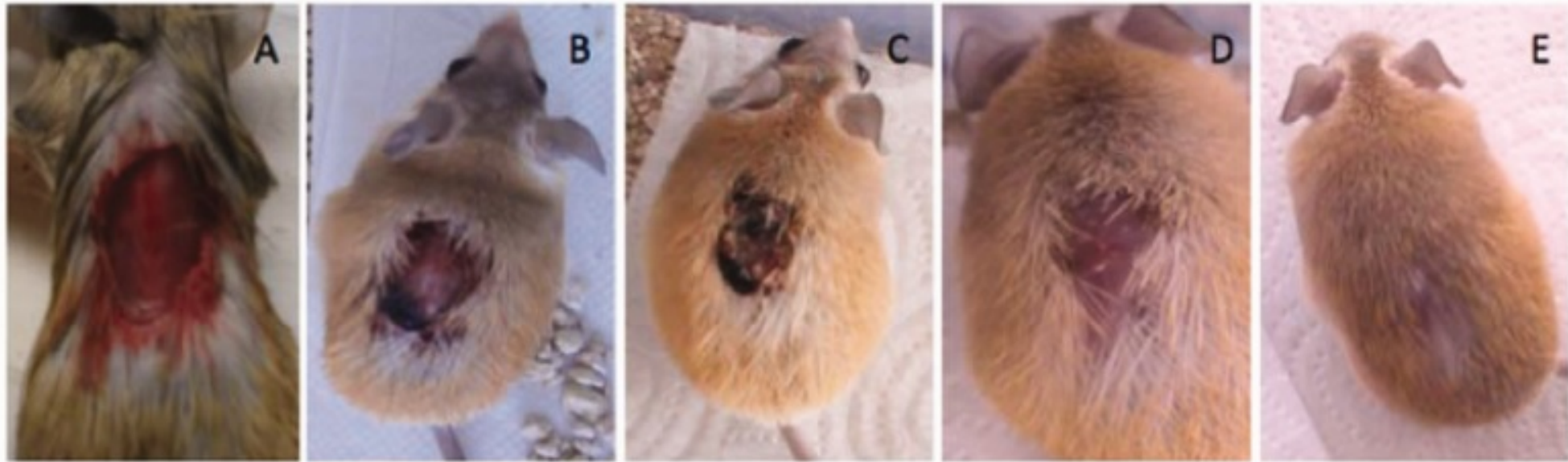


Figure 4. Remarkable healing and regeneration of skin wounds in adult *A. cahirinus*. (a) An adult animal caught in a dysfunctional running wheel tore himself free; the wound was trimmed clean but was otherwise not treated. (b) 2 days post-injury, (c) 12 days post-injury, (c) 21 days post-injury and (e) 50 days post-injury.



Figure 4- Comparison of 2 mm ear punch closure in *Mus* (up) and *Acomys* (down) at weeks 1, 2, 3 and 4. Contrary to *Mus*, after 3 weeks, *Acomys* presents the ear punch completely closed (yellow arrow). Adapted from (Brewer et al. 2021)

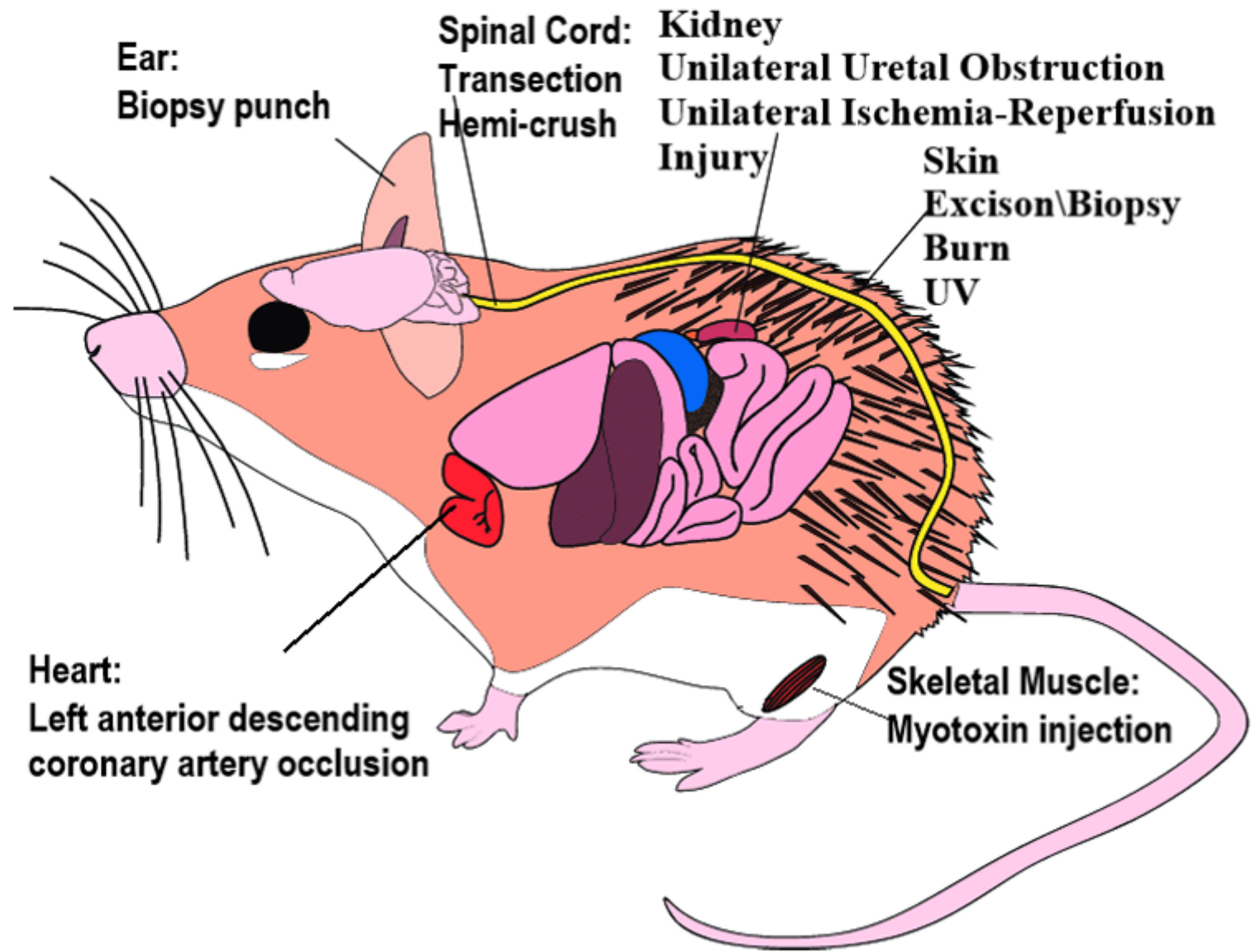
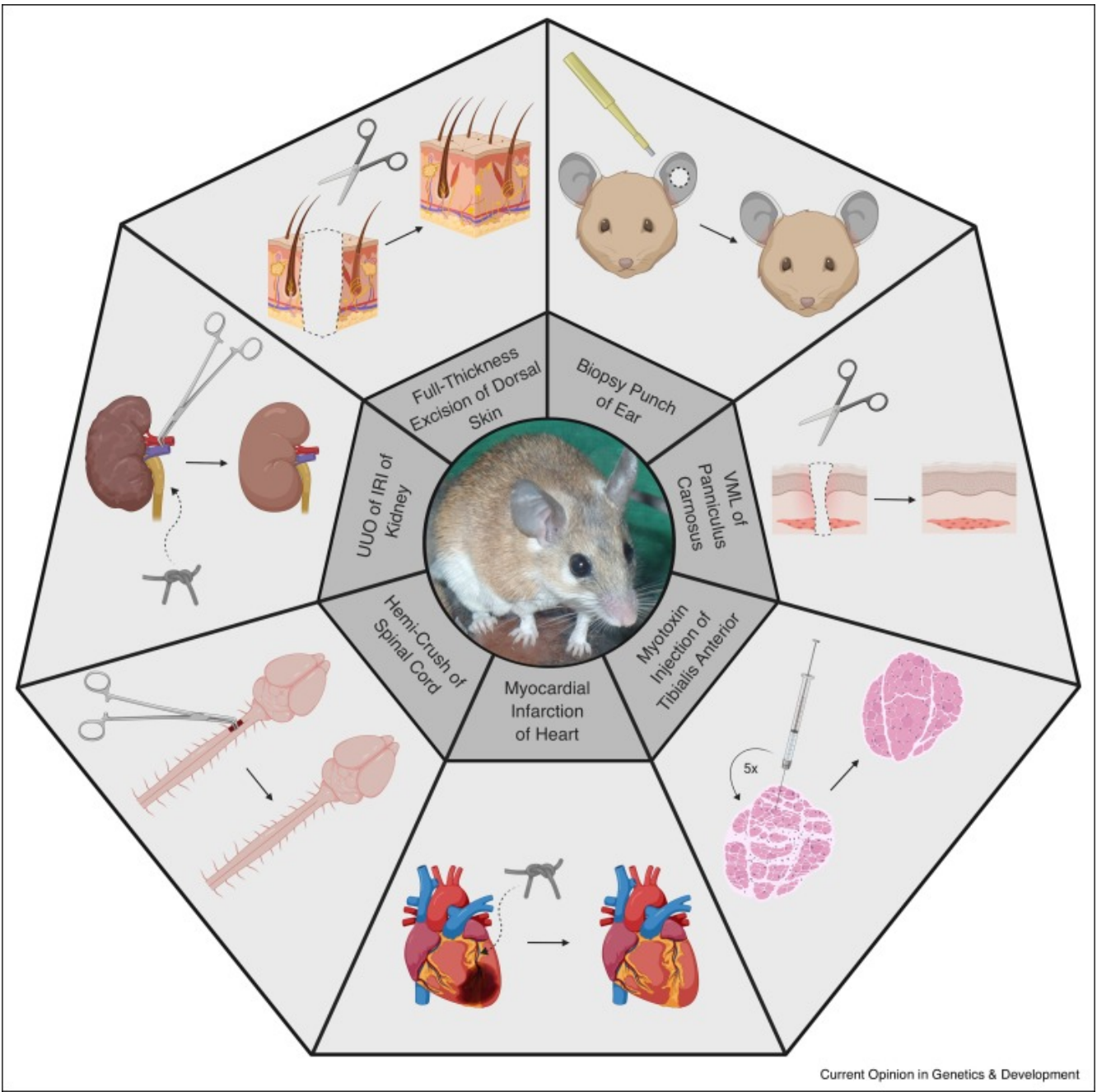


Figure 1- Study models of regeneraton in *Acomys*. Adapted from (Maden and Varholick 2020)



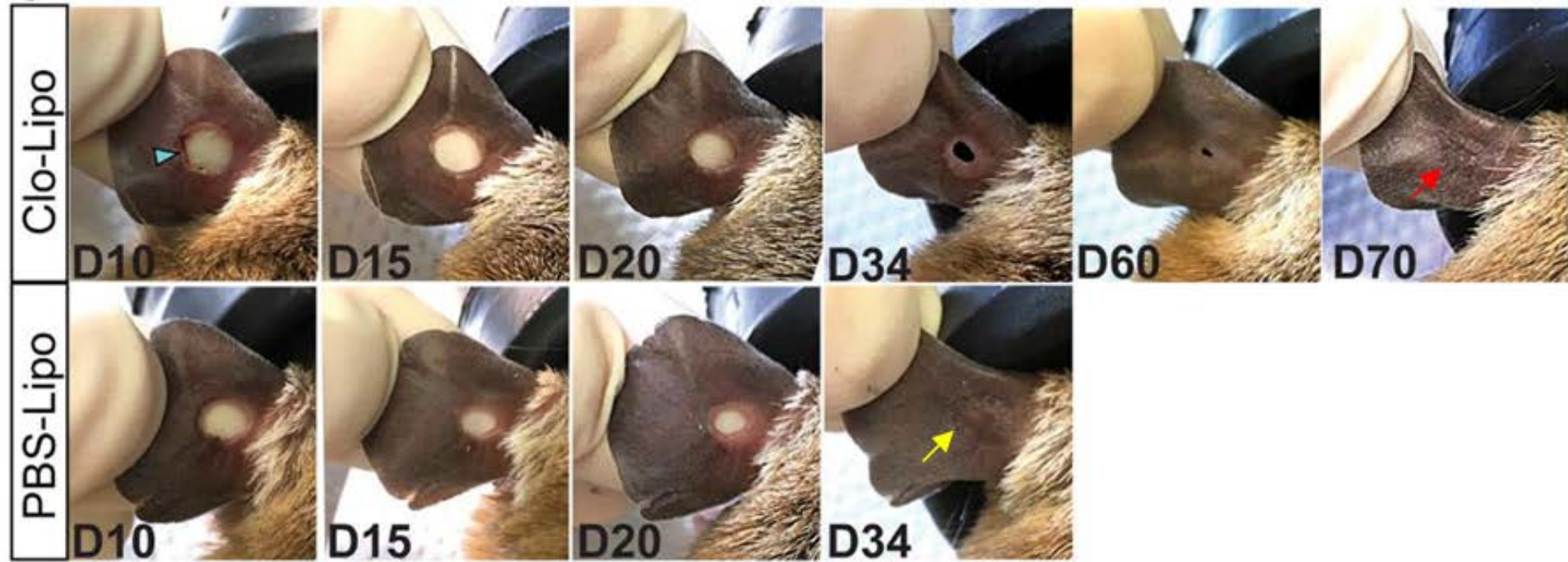


Figure 5- Comparison of 4mm ear punch closure in *Acomys* injected with Clo-Lipo (up) and controls (down) at days 10, 15, 20, 34, 60 and 70. The control ears close the wound 34 days after wound (yellow arrow) while in deficient of macrophages condition, the ear only closes after 70 days (red arrow). Adapted from (Simkin et al. 2017)



Остеодермы – кожные окостенения, у млекопитающих практически не встречаются

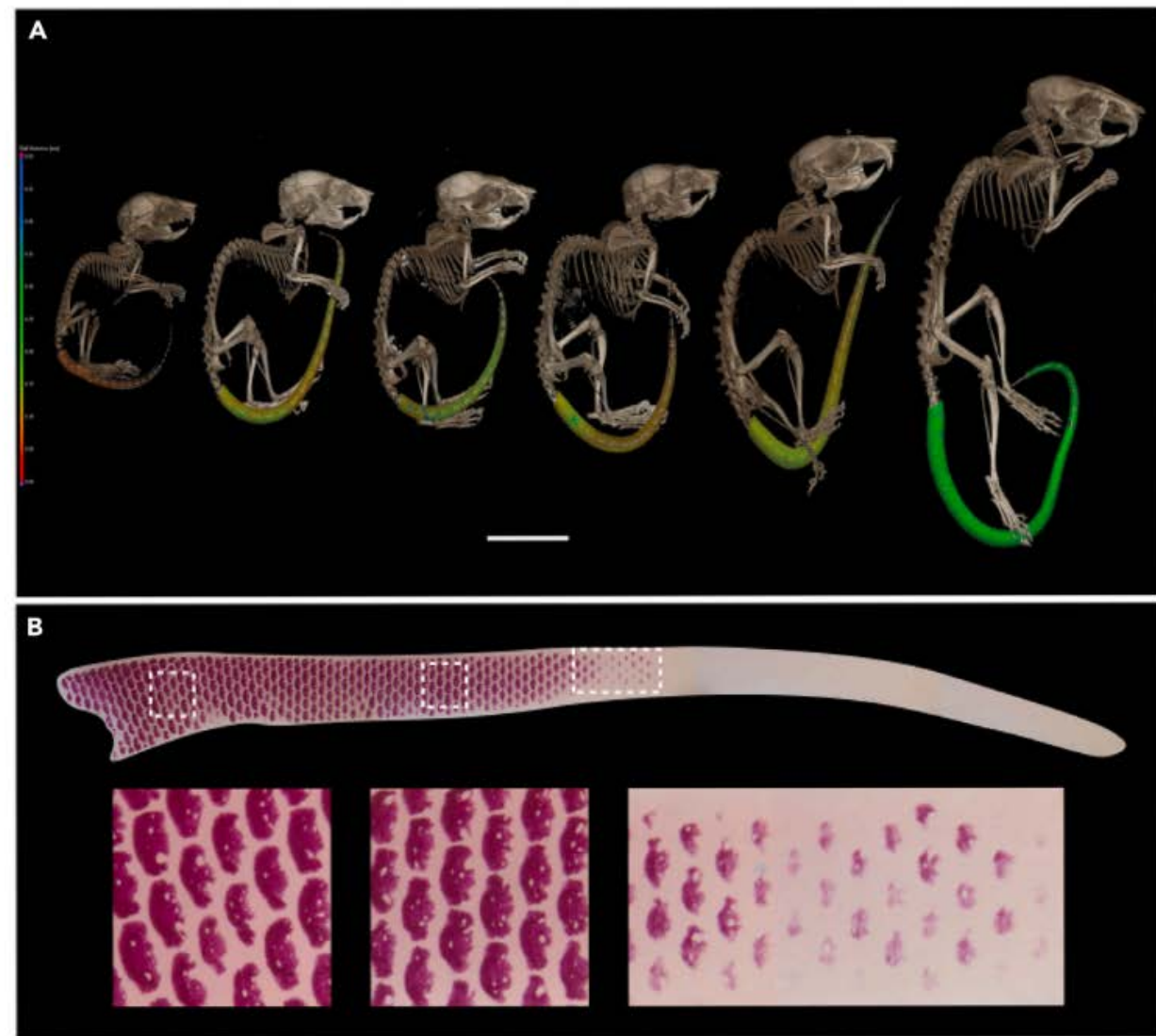


Figure 2. Development of osteoderms in *Acomys*

(A) Timed series of scans of *Acomys cahirinus* from postnatal day 1 (far left) to 2 years adult (far right) showing the presence of osteoderms initially only in the proximal part of the tail and then spreading throughout. Scale bar = 10 mm.

(B) Alizarin red stained newborn tail (upper) showing the presence of osteoderms in the proximal half and their absence in the distal half. A close-up of each white box is shown below revealing their regular patterning (with holes in each osteoderm) and their pattern of differentiation starting on the dorsal surface and spreading ventrally.

Спасибо за внимание!

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