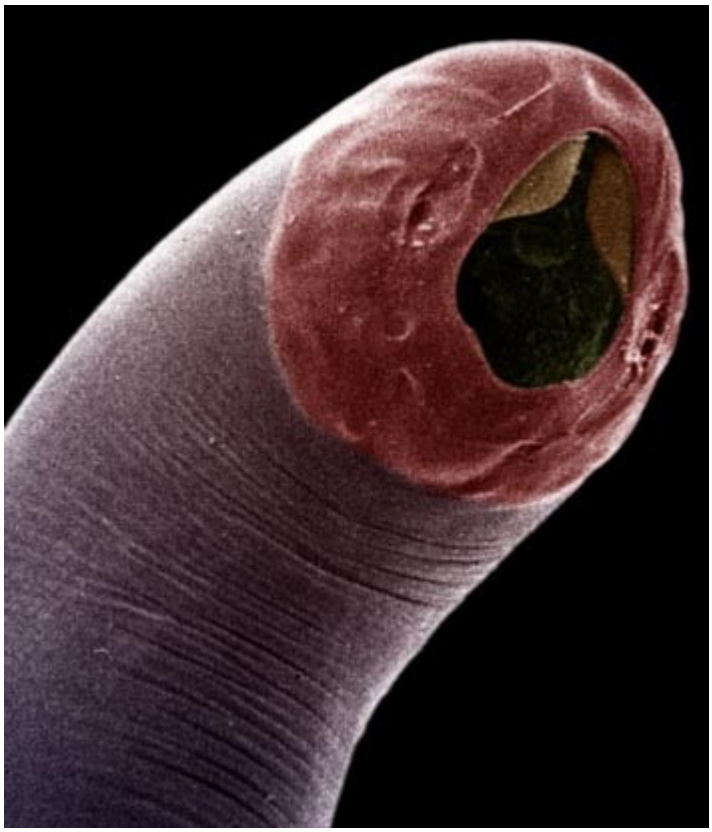
Twitter Thread by Jimmy Bernot PhD ■■■■■■

Jimmy Bernot PhD ■■■■■■
@JimmyBernot

Heres the story of how I volunteered to be infected with 50 parasitic worms (hookworm) for a year as part of a research study. Check out this thread & follow me for more #parasite & marine biology content [t]
#ScienceTwitter
imgs: https://t.co/hH5YsfS0ay https://t.co/kVurE6BbTS

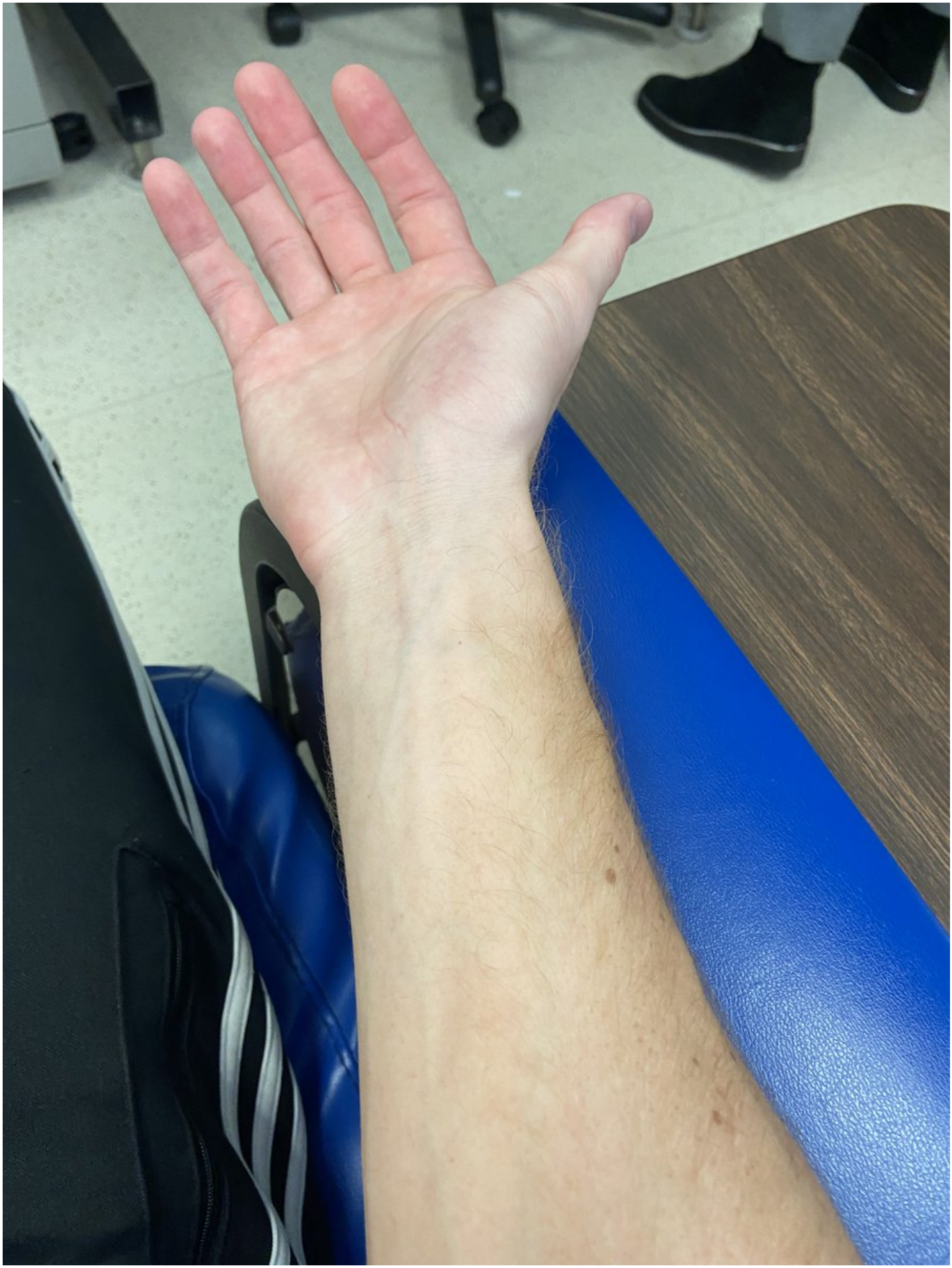


1st some background on the parasites I got. Hookworms are blood-feeding nematodes that live in the intestine of mammals including cats, dogs & humans. ~500 million people are infected with hookworm, mostly in tropical and subtropical areas including the southern USA

Infection with many worms (100+) can cause anemia, which is most problematic in kids, pregnant women, and the elderly. This clinical study was launched to try to develop a vaccine against hookworms to prevent infection

People become infected when baby worms living in the soil penetrate their skin. Baby worms hatch from eggs that infected people poop out. Where plumbing is scarce, poor waste disposal is a common source of heavy infections (100s to 1,000s of worms)

I volunteered to be vaccinated with an experimental hookworm vaccine (I was also paid). After vaccination, the vaccine (or placebo idk) was tested by infecting me with 50 hookworms (Necator americanus) that penetrated my skin from a patch of gauze I wore on my wrist for 1 hour



Within minutes I felt a tingling sensation under the patch. The baby worms were penetrating my skin! The worms sense fatty acids in my skin and release proteolytic enzymes to make it easier to slip between my skin cells and into my blood vessels.