DERMATOLOGISTS IN PLATO'S CAVE

The shadow on the wall is not the fire that casts it

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> *"You give your disciples not truth, but only the semblance of truth… the show of wisdom without the reality."*
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> — THAMUS TO THEUTH · PLATO, PHAEDRUS, C. 370 BC

In Plato's *Republic* (Book VII), Socrates narrates the Phaedrus Cave story wherein prisoners chained in the cave take shadows for reality. Freed, they are blinded by sunlight, but disorientation leaves them unable to recognize real people and objects they previously only saw as shadows. As AI mediates how dermatologists see disease, we risk diagnosing the shadow and missing the fire.

70→17%	**The shadows.** AI hits ~94% sensitivity yet the tool's accuracy is far lower in dark-skinned patients, ~90% of generated derm images show light skin.
+1°C	**The fire.** Skin is an ecological membrane: +1 °C of warming raises UV's carcinogenic potency +5% and eczema +9%. Melanoma already causes one death per hour in the US.
550t	**The carbon.** One model's training ≈ 550 t CO_2e; a query ≈ 4.3 g (~20× a search); data-centre demand may double by 2030. Carbon → warming → more UV.
5mph	**Effective speed.** Illich found the motorist's true speed, all costs counted, was under 5 mph. Dermatology needs the same ledger, benefit across *all* populations, net of carbon.

STEP OUT OF THE CAVE

Diversify data across every skin tone, publish equity-stratified performance before approval, disclose AI's carbon like a drug's side-effects, and pair algorithms with people, to look beyond the algorithm and see the fire casting the shadows we diagnose.

ILLICH'S ARITHMETIC · THE COST ANALOGY

Effective speed: under 5 mph

In 1973 Illich counted every hidden cost, to buy, fuel, insure and repair, and the car proved no faster than the horse. Dermatology must reckon AI's true cost, across every patient, before claiming its speed.

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