



DISCOVER TRUTH

The Origins Field Guide

How to check claims about ancient texts, the historical Jesus and human evolution, with the sources on the page.

FREE SAMPLE · CHAPTER 3 + FIELD CHECKLIST

FREE SAMPLE

The Origins Field Guide

This sample contains Chapter 3, "A messy family history," in full, and the field checklist.

The labels: **EVIDENCE** checkable fact · **ANCIENT TEXT** what a translated text says · **INTERPRETATION** what scholars infer · **BELIEF** faith claim · **SPECULATION** untested idea · **UNVERIFIED** source not yet seen by us.

The full guide (59 pages) adds Chapter 1 (the Anunnaki and the Mesopotamian creation texts), Chapter 2 (Jesus outside the Gospels), a source reader of public-domain translations, worked examples, a discussion guide, a glossary and full sources.

Every photograph is a real, credited archive image. No AI-generated images. Diagrams are code-drawn by Discover Truth from the numbers in the sources.

© 2026 Discover Truth. Free to share unaltered.



CHAPTER 3

A messy family history

What fossils and ancient DNA say about where our species came from, and what the molecular clock can't promise.

The question

When did our species appear, and how? Two popular stories pull in opposite directions. One says humans appeared suddenly, perhaps by design. The other is a tidy textbook ladder from ape to human. The evidence fits neither. It shows a branching, interbreeding family, and dates that come with error bars.

THE SHORT ANSWER

EVIDENCE The oldest fossils currently assigned to the *Homo sapiens* lineage come from Jebel Irhoud, Morocco, dated to about 315,000 years ago ($\pm 34,000$). Ancient genomes show that our ancestors interbred with Neanderthals and Denisovans. **INTERPRETATION** The data support a mainly African origin with limited interbreeding. Scientists call it "leaky replacement." We see no sign of a sudden break.

KEY DATES (THOUSANDS OF YEARS AGO, LOG SCALE)

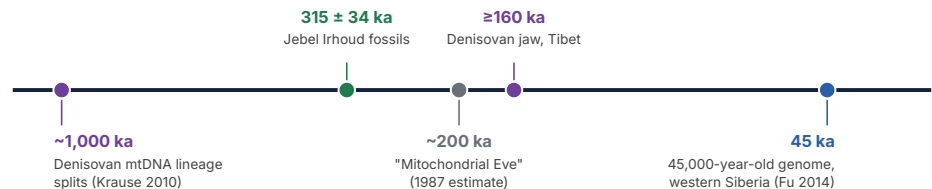


Diagram: Discover Truth. Dates as reported in the papers cited in Chapter 3

1. Jebel Irhoud: faces like ours, heads not yet

EVIDENCE In 2017, two papers in *Nature* reported new fossils and dates from Jebel Irhoud. The dating team placed the fossils and stone tools "at 315 ± 34 thousand years ago," supported by a separate date of 286 ± 32 thousand years for a tooth. (Richter et al. 2017)

The anatomy team described "a mosaic of features." The face, jaw and teeth align with modern humans, while the braincase is "more primitive." (Hublin et al. 2017)



Stone tools from Jebel Irhoud, Morocco, Middle Stone Age. These tools were found with the fossils, and the 315,000-year date comes from them. Mohammed Kamal, MPI EVA Leipzig, via Wikimedia Commons (CC BY 4.0)

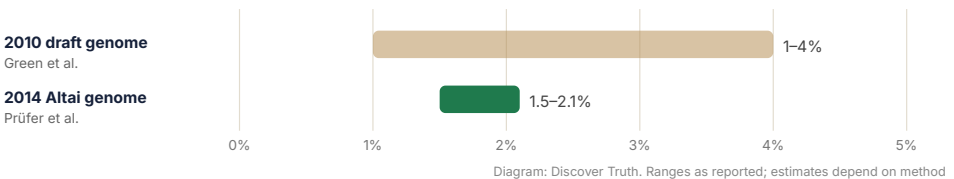
INTERPRETATION Hublin's team calls Irhoud evidence of "early stages of the *H. sapiens* clade." So the careful phrase is "the oldest fossils currently assigned to our lineage," not "the first modern humans." Their braincases aren't modern yet. Our species took shape gradually.

DEBATED Some researchers call Irhoud "early" or "archaic" *H. sapiens*, or a closely related sister lineage.

2. Neanderthal DNA in us

EVIDENCE The first draft Neanderthal genome (Green et al. 2010) suggested "that between 1 and 4% of the genomes of people in Eurasia are derived from Neandertals." A high-quality genome from the Altai Mountains refined it: "the proportion of Neandertal-derived DNA in people outside Africa is 1.5–2.1%" (Prüfer et al. 2014).

NEANDERTHAL DNA IN PEOPLE OUTSIDE AFRICA



EVIDENCE These figures depend on method. A later genome from Vindija Cave allowed "10 to 20% more Neanderthal DNA to be identified in present-day humans" (Prüfer et al. 2017). One common claim, that Africans carry no Neanderthal DNA, is **wrong**. A 2020 study

found "African individuals carry a stronger signal of Neanderthal ancestry than previously thought" (Chen et al. 2020).

EVIDENCE Interbreeding wasn't always good for us. Regions of our genome with little Neanderthal ancestry "are enriched in genes, implying selection to remove genetic material derived from Neanderthals" (Sankararaman et al. 2014).

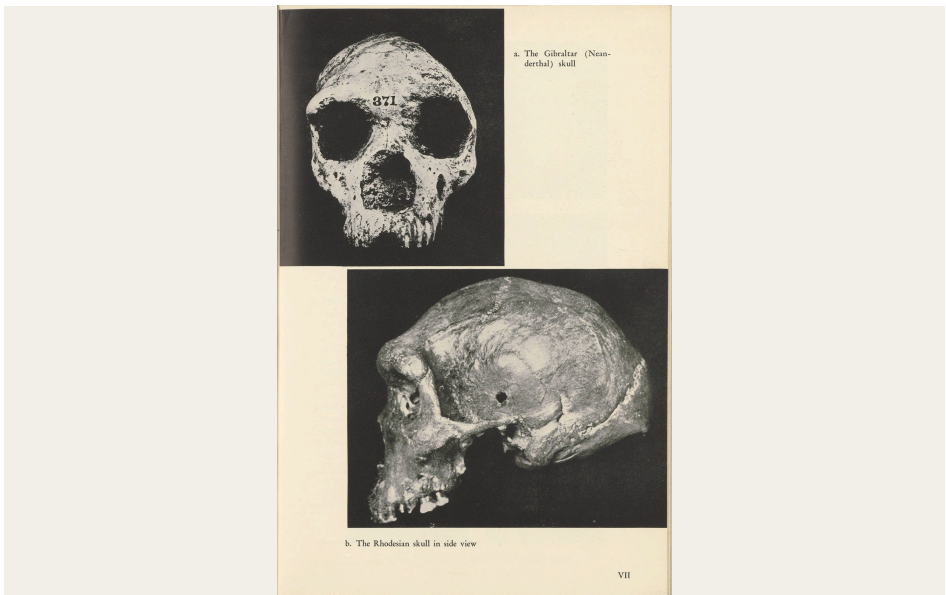
3. The Denisovans: found by their DNA

EVIDENCE In 2010, DNA from a bone found in Denisova Cave, southern Siberia, revealed "a hitherto unknown type of hominin" (Krause et al. 2010). The group was named Denisovans. The 2010 estimate was that they "contributed 4–6% of [their] genetic material to the genomes of present-day Melanesians" (Reich et al. 2010). Later estimates differ, and we haven't checked which is current. In 2019, a jaw from the Tibetan Plateau, at least 160,000 years old, was identified as Denisovan (Chen F. et al. 2019).

INTERPRETATION In the words of Prüfer et al. (2014): "interbreeding, albeit of low magnitude, occurred among many hominin groups in the Late Pleistocene."



Le Moustier Neanderthal skull, Neues Museum, Berlin. Gary Todd, via Wikimedia Commons (CC0)



Gibraltar Neanderthal skull and the Broken Hill (Kabwe) skull, historic photographs. The human family tree has always been bushier than a ladder. Wellcome Collection (Wellcome Images L0067078), via Wikimedia Commons (CC BY 4.0)

4. How the molecular clock works, and why it wobbles

EVIDENCE DNA dates work like a clock: count the differences, divide by the mutation rate. The clock is only as good as that rate. In 2012, Scally and Durbin reported that direct measurements give "a value that is approximately half of that previously derived from fossil calibration." Halve the rate, and many divergence dates roughly double.

SAME DNA, DIFFERENT RATE, DIFFERENT DATE

Older, fossil-calibrated rate

date = T

Directly measured rate

≈ half as fast (Scally & Durbin 2012)

≈ 2T

Date ≈ number of differences ÷ mutation rate. Halve the rate, and the date roughly doubles.

Diagram: Discover Truth (schematic, not to scale)

INTERPRETATION This is why the famous "Mitochondrial Eve," estimated in 1987 to have lived "about 200,000 years ago, probably in Africa" (Cann, Stoneking & Wilson), is a moving target. She is also **not the first woman**. She is the most recent common ancestor of today's mitochondrial DNA, one ancestor among many living at that time.

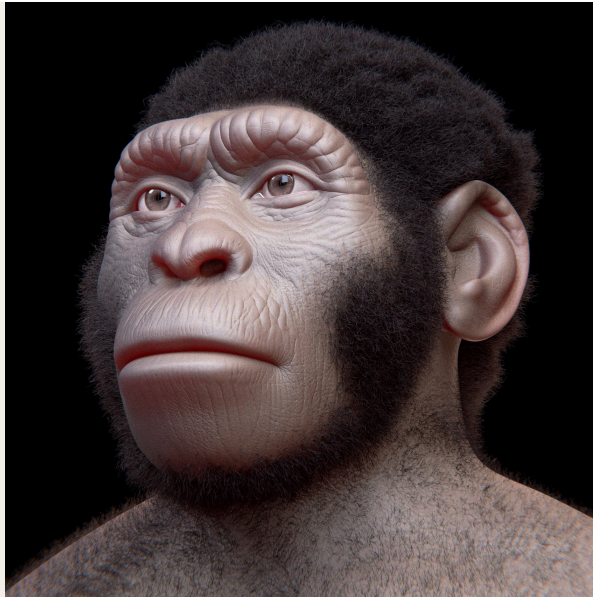
5. Where the "engineered humans" idea fits

SPECULATION Some ancient-astronaut writers say *Homo sapiens* was engineered around 300,000 years ago, and they point to Jebel Irhoud. Honestly noted: the dates do roughly coincide. **UNVERIFIED** We haven't confirmed Sitchin's own date and page.

INTERPRETATION A coincidence of dates isn't evidence of a mechanism. An engineering event would need a discontinuity, a sudden break. The fossils show a mosaic that changes gradually, and the genomes show ordinary, low-level interbreeding with other human groups. That doesn't prove nobody intervened. It means the data show no sign of it. Our wording: "a messy, interbred family history, with no sign of a sudden break."



Hominin tibia from Koobi Fora, Kenya (KNM-ER 741), with close-ups of marks analyzed in a 2023 study. Careful methods show both what a fossil can tell us and what it can't. Briana Pobiner, Michael Pante & Trevor Keevil (Scientific Reports 2023), via Wikimedia Commons (CC BY 4.0)



RECONSTRUCTION (ARTIST'S IMPRESSION) A forensic facial reconstruction of *Homo naledi*, another member of the human family (not discussed in our dossier). Reconstructions are educated interpretations, not photographs. Cicero Moraes (Arc-Team) et alii, via Wikimedia Commons (CC BY 4.0)

Claim check: human origins

CLAIM	LABEL	WHAT WE FOUND
Jebel Irhoud fossils are about 300,000 years old	EVIDENCE	Yes: 315 ± 34 ka; 286 ± 32 ka for a tooth
They are "the oldest fossils of our species"	INTERPRETATION	Hedge it: "oldest assigned to our lineage"
Non-Africans carry about 1–2% Neanderthal DNA	EVIDENCE	Yes: 1.5–2.1% (2014). Depends on method
Africans carry no Neanderthal DNA	—	Wrong: Chen et al. 2020
Denisovans were identified from DNA first	EVIDENCE	Yes: 2010
DNA dates are precise	—	No: rate revisions of about $2\times$
Mitochondrial Eve was the first woman	—	Wrong
Humans were engineered	SPECULATION	No sign of the required break in the data

Competing readings

INTERPRETATION Recent African origin with admixture

The mainstream view. *H. sapiens* emerged across Africa ("pan-African," in Hublin's word) by about 300,000 years ago. Populations later spread out of Africa and absorbed small amounts of Neanderthal and Denisovan DNA.

INTERPRETATION Multiregional evolution

Human populations evolved as one interconnected species across Africa and Eurasia, with gene flow. Its strength: interbreeding is real. Its weakness: the archaic share is small, and most variation traces to Africa.

INTERPRETATION "Structured stem" models

The African root itself was a network of interacting populations. This fits Hublin's "pan-African" picture. (We haven't read the specific papers.)

SPECULATION Intervention

Humans were engineered. This requires a discontinuity that neither the fossils nor the genomes show.

BELIEF Religious creation beliefs

Many traditions affirm divine creation. Many believers accept evolution as the means (theistic evolution); some don't. Science can test physical claims such as age and descent, not divine purpose.

WHAT WOULD CHANGE OUR MIND

- An older fossil with fully modern skull anatomy outside Africa.
- Genomes showing majority archaic ancestry in a living population.
- A large, abrupt, unexplained genetic break at the origin of *H. sapiens*.
- New dates for Jebel Irhoud, which would move the "300,000 years" figure.

OPEN QUESTIONS: HELP US CHECK

1. **Is Irhoud "us"?** Send a peer-reviewed paper arguing it isn't *H. sapiens*.
2. **Denisovan percentages.** What's the best current estimate for Papuans and Aboriginal Australians? DOI, please.
3. **The clock.** Find one human-evolution date that moved a lot when the mutation rate was revised, with before-and-after papers.
4. **Neanderthal DNA in Africa.** Has Chen et al. 2020 been replicated or challenged?
5. **Sitchin's date.** Where exactly (book and page) does Sitchin date the creation of humans?

The field checklist

Ten questions to ask of any claim about the ancient past. Photocopy it, screenshot it, keep it by your keyboard.

- 1 **What kind of statement is this?** Evidence, ancient text, interpretation, belief or speculation? Label it before you judge it. ☐
- 2 **Which text, which lines?** A real claim names the work and the line or section: "*Atrabasis* I," "*Annals* 15.44." "Ancient texts say..." isn't a citation. ☐
- 3 **Whose translation?** Name the translator and the year. Compare at least two translations when a word carries the argument. ☐
- 4 **Is the object real and findable?** Look for a museum number (BM, VAT, P-number, accession number) and a findspot. ☐
- 5 **Does the word mean that?** Check a standard dictionary (for Sumerian, ePSD₂). A gloss nobody else uses is a red flag. ☐
- 6 **Who does what in the story?** Re-read the passage for roles. (In *Atrabasis*, the Igigi labor, not the Anunnaki.) ☐
- 7 **How old is the idea, really?** Find the earliest version. Ideas often look newer or older than they are. (Ancient astronauts: 1966, not 1976.) ☐
- 8 **What's the strongest point against my view?** State it fairly. If you can't find one, you haven't looked yet. ☐
- 9 **What would change my mind?** Name a specific finding. If nothing could, it's a belief. That's fine, as long as you call it one. ☐
- 10 **How sure is the date?** Look for the $\pm$ error bar and the method. Rates and calibrations get revised. ☐

RED FLAGS

- "Scholars are hiding..." with no named scholar or paper
- Quoting a translation without naming it
- "First," "oldest," "only" or "proves," with no source
- Images of "tablets" with no museum number
- AI art or reconstructions shown as evidence
- An absence ("no one has found...") stated as certain

TRY IT NOW

Take this claim: "*The Sumerian words DINGIR and MU really mean rockets or sky-vehicles.*" Run it through questions 1, 4 and 5. Our answer: it's a modern gloss, labeled **SPECULATION**. The standard dictionary gives "deity, god, goddess; personal god" for *dingir* and "name" or "year" for *mu*, with no vehicle sense (**EVIDENCE**, ePSD2). See Chapter 1, §5.

Image credits

Every photograph in this guide is a real archive image. Licenses were checked on Oct 9, 2026, and full rights evidence for each is in the Discover Truth library catalog. CC0 and public-domain images need no credit, but we credit them anyway. CC BY images are used under the license terms linked; no changes were made beyond cropping and scaling.

License texts: CC BY 2.0 <https://creativecommons.org/licenses/by/2.0/> · CC BY 2.5 <https://creativecommons.org/licenses/by/2.5/> · CC BY 3.0 <https://creativecommons.org/licenses/by/3.0/> · CC BY 4.0 <https://creativecommons.org/licenses/by/4.0/> · CC0 1.0 <https://creativecommons.org/publicdomain/zero/1.0/>

Cylinder Seal (Mesopotamia, Early Dynastic period), c. 3000 BCE. Cleveland Museum of Art, 1964.458. Cleveland Museum of Art, Gift of Mrs. Robert M. Hornung (CC0). License: CC0 1.0 (CMA Open Access). Source: <https://clevelandart.org/art/1964.458>. [MES-025]

Olduvai gorge - Flickr - gailhampshire. Wikimedia Commons. gailhampshire from Cradley, Malvern, U.K, via Wikimedia Commons (CC BY 2.0). License: CC BY 2.0. Source: https://commons.wikimedia.org/wiki/File%3AOlduvai_gorge_-_Flickr_-_gailhampshire.jpg. [EVO-007]

Stone tools from Jebel Irhoud. Wikimedia Commons. Mohammed Kamal, MPI EVA Leipzig, via Wikimedia Commons (CC BY 4.0). License: CC BY 4.0. Source: https://commons.wikimedia.org/wiki/File%3AStone_tools_from_Jebel_Irhoud.png. [EVO-021]

Le Moustier Neanderthal Skull Neues Museum Berlin. Wikimedia Commons. Gary Todd, via Wikimedia Commons (CC0). License: CC0. Source: https://commons.wikimedia.org/wiki/File%3ALe_Moustier_Neanderthal_Skull_Neues_Museum_Berlin.jpg. [EVO-015]

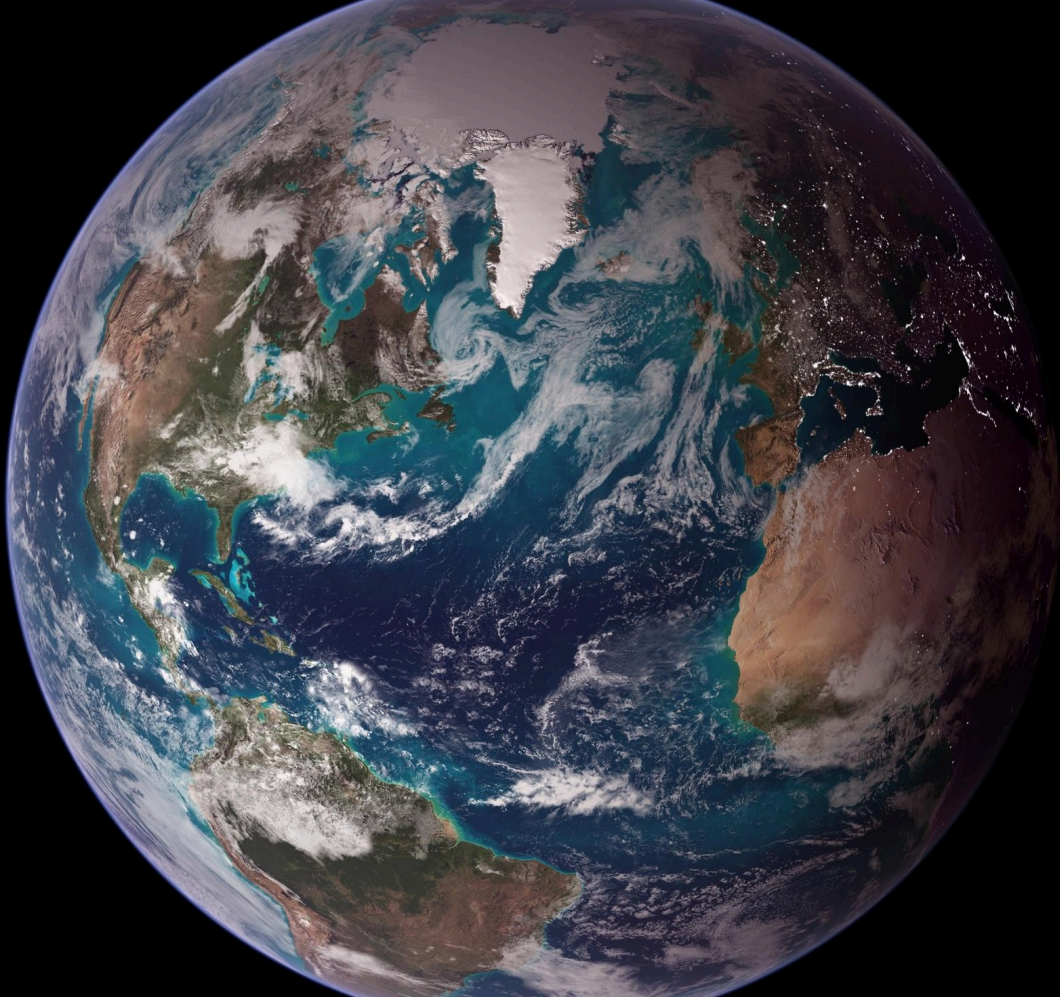
The Gibraltar Neanderthal skull and Rhodesian skull. Wikimedia Commons. Wellcome Collection (Wellcome Images L0067078), via Wikimedia Commons (CC BY 4.0). License: CC BY 4.0. Source: https://commons.wikimedia.org/wiki/File%3AThe_Gibraltar_Neanderthal_skull_and_Rhodesian_skull_Wellcome_L0067078.jpg. [EVO-016]

Hominin tibia from Koobi Fora. Wikimedia Commons. Briana Pobiner, Michael Pante & Trevor Keevil (Scientific Reports 2023), via Wikimedia Commons (CC BY 4.0). License: CC BY 4.0. Source: https://commons.wikimedia.org/wiki/File%3AHominin_tibia_from_Koobi_Fora.jpg. [EVO-020]

Homo naledi facial reconstruction. Wikimedia Commons. Cicero Moraes (Arc-Team) et alii, via Wikimedia Commons (CC BY 4.0). License: CC BY 4.0. Source: https://commons.wikimedia.org/wiki/File%3AHomo_naledi_facial_reconstruction.jpg. [EVO-002]

NASA Blue Marble 2007 West. NASA (GSFC), GSFC_20171208_Archive_e002131. NASA. License: US Government work (NASA), not subject to US copyright. Source: https://images.nasa.gov/details/GSFC_20171208_Archive_e002131. [NRG-017]

Diagrams and highlighting are original Discover Truth artwork. No AI-generated images appear in this guide.



Check it yourself.

FREE SAMPLE

This sample includes Chapter 3 and the field checklist. The full guide also covers the Anunnaki texts, the historical Jesus, a source reader, a glossary and full sources.

The Origins Field Guide puts the tablets, manuscripts and fossils on the page, labels every claim, and tells you what would change our mind. Keep investigating with us: open questions, public corrections, and credit for contributors who choose it.

Back cover: Earth, NASA Blue Marble 2007 (public domain, NASA). [youtube.com/@DiscoverTruth17](https://www.youtube.com/@DiscoverTruth17)