# References

## **Afrika**

FREGEL 2018

Rosa Fregel et al., Ancient genomes from North Africa evidence prehistoric migrations to the Maghreb from both the Levant and Europe. PNAS 115 (2018), 6774–6779.

pnas115-06774-Supplement.pdf

Rosa Fregel, Fernando L. Méndez, Youssef Bokbot, Dimas Martín-Socas, María D. Camalich-Massieu, Jonathan Santana, Jacob Morales, María C. Ávila-Arcos, Peter A. Underhill, Beth Shapiro, Genevieve Wojcik, Morten Rasmussen, André E. R. Soares, Joshua Kapp, Alexandra Sockell, Francisco J. Rodríguez-Santos, Abdeslam Mikdad, Aioze Trujillo-Mederos & Carlos D. Bustamante

The extent to which prehistoric migrations of farmers influenced the genetic pool of western North Africans remains unclear. Archaeological evidence suggests that the Neolithization process may have happened through the adoption of innovations by local Epipaleolithic communities or by demic diffusion from the Eastern Mediterranean shores or Iberia. Here, we present an analysis of individuals' genome sequences from Early and Late Neolithic sites in Morocco and from Early Neolithic individuals from southern Iberia. We show that Early Neolithic Moroccans  $(\approx 5,000 \text{ BCE})$  are similar to Later Stone Age individuals from the same region and possess an endemic element retained in present-day Maghrebi populations, confirming a long-term genetic continuity in the region. This scenario is consistent with Early Neolithic traditions in North Africa deriving from Epipaleolithic communities that adopted certain agricultural techniques from neighboring populations. Among Eurasian ancient populations, Early Neolithic Moroccans are distantly related to Levantine Natufian hunter-gatherers ( $\approx 9,000$  BCE) and Pre-Pottery Neolithic farmers ( $\approx 6,500$  BCE). Late Neolithic ( $\approx 3,000$  BCE) Moroccans, in contrast, share an Iberian component, supporting theories of trans-Gibraltar gene flow and indicating that Neolithization of North Africa involved both the movement of ideas and people. Lastly, the southern Iberian Early Neolithic samples share the same genetic composition as the Cardial Mediterranean Neolithic culture that reached Iberia ≈5,500 BCE. The cultural and genetic similarities between Iberian and North African Neolithic traditions further reinforce the model of an Iberian migration into the Maghreb.

Keywords: ancient DNA | North Africa | Neolithic transition | paleogenomics Significance: The acquisition of agricultural techniques during the so-called Neolithic revolution has been one of the major steps forward in human history. Using next-generation sequencing and ancientDNA techniques, we directly test whether Neolithization in North Africa occurred through the transmission of ideas or by demic diffusion. We show that Early Neolithic Moroccans are composed of an endemic Maghrebi element still retained in present-day North African populations, resembling the genetic component observed in Later Stone Age communities from Morocco. However, Late Neolithic individuals from North Africa are admixed, with a North African and a European component. Our results support the idea that the Neolithization of North Africa involved both the development of Epipaleolithic communities and the migration of people from Europe.

#### MALVILLE 2012

J. McKim Malville, Climate Change, Nomadic Pastoralism, and Astronomy at Nabta Playa, Southern Egypt. In: Proceedings of the SEAC Conference, Alexandria, Egypt. (in press 2012), 1–16.

The megalithic ceremonial center of Nabta Playa in the Sahara west of Abu Simbel was built sometime after 7500 BP following a short but deep period of aridity. Ritual activity appears first in the Valley of Sacrifices, which contains human and cattle burials and a stone circle with alignments to north-south and June solstice sunrise. These directions reveal two major elements in the life of the nomads: north was necessary for navigation across the desert and June solstice was the time for the arrival of summer monsoon rains. The circle may have been a focus for rainmaking ritual. To the south of the Valley of Sacrifices there are 30 complex megalithic structures built during the Terminal Neolithic starting about 6500 BP. The largest of these is the focal point for five alignments of stele, which may have been aligned to bright stars of the local sky. Nabta Playa demonstrates that a complex ceremonial center can develop from a nomadic culture without the features of sedentism such as agriculture, permanent villages, and a religio-political hierarchy.

## **Aktuell**

## ALLEN 2018

Mitchell Allen, Beware the Predatory Journal, It's Not Just Fieldwork That Is Dangerous. SAA Archaeological Record 18 (2018), iii, 6–9.

Beall's List, as this blacklist of predatory journals and publishers came to be called, became the source that scholars, librarians, university administrators, grant oicers, and tenure committees checked to ascertain the academic validity of an otherwise-unknown journal. It was also noticed by the companies who launched these journals; his list was a clear threat to their inancial success. The result was threats, harassment, and lawsuits against Beall and against his employer, the University of Colorado Denver, from these predatory publishers. The endless attacks eventually took their toll. Abruptly, in January 2017, Beall's List disappeared from the Web, to be found only at mirror sites (http://beallslist.weebly.com/), frozen at the date of the list's disappearance (Straumsheim 2017). Beall has kept a low proile since, stating only "They kept sending the emails to the university chancellor and others, hoping to implement the heckler's veto. They tried to be as annoying as possible to the university so that the oicials would get so tired of the emails that they would silence me just to make them stop" (Beall, cited in Ravindranath 2017).

### Bratsberg 2018

Bernt Bratsberg & Ole Rogeberg, Flynn effect and its reversal are both environmentally caused. PNAS 115 (2018), 6674–6678.

pnas115-06674-Supplement.pdf

Population intelligence quotients increased throughout the 20th century—a phenomenon known as the Flynn effect—although recent years have seen a slowdown or reversal of this trend in several countries. To distinguish between the large set of proposed explanations, we categorize hypothesized causal factors by whether they accommodate the existence of within-family Flynn effects. Using administrative register data and cognitive ability scores from military conscription data covering three decades of Norwegian birth cohorts (1962–1991), we show that the observed Flynn effect, its turning point, and subsequent decline can all be fully

recovered from within-family variation. The analysis controls for all factors shared by siblings and finds no evidence for prominent causal hypotheses of the decline implicating genes and environmental factors that vary between, but not within, families.

 $\mbox{\sf Keywords: intelligence} \mid \mbox{\sf Flynn effect} \mid \mbox{\sf environmental influences} \mid \mbox{\sf dysgenic fertility}$ 

Significance: Using administrative register data with information on family relationships and cognitive ability for three decades of Norwegian male birth cohorts, we show that the increase, turning point, and decline of the Flynn effect can be recovered from within-family variation in intelligence scores. This establishes that the large changes in average cohort intelligence reflect environmental factors and not changing composition of parents, which in turn rules out several prominent hypotheses for retrograde Flynn effects.

# **Anthropologie**

#### Li 2018

Jingjing Li, Xiumei Hong, Sam Mesiano, Louis J. Muglia, Xiaobin Wang, Michael Snyder, David K. Stevenson & Gary M. Shaw, Natural Selection Has Differentiated the Progesterone Receptor among Human Populations. American Journal of Human Genetics (2018), 1–13.

The progesterone receptor (PGR) plays a central role in maintaining pregnancy and is significantly associated with medical conditions such as preterm birth that affects 12.6% of all the births in U.S. PGR has been evolving rapidly since the common ancestor of human and chimpanzee, and we herein investigated evolutionary dynamics of PGR during recent human migration and population differentiation. Our study revealed substantial population differentiation at the PGR locus driven by natural selection, where very recent positive selection in East Asians has substantially decreased its genetic diversity by nearly fixing evolutionarily novel alleles. On the contrary, in European populations, the PGR locus has been promoted to a highly polymorphic state likely due to balancing selection. Integrating transcriptome data across multiple tissue types together with large-scale genomewide association data for preterm birth, our study demonstrated the consequence of the selection event in East Asians on remodeling PGR expression specifically in the ovary and determined a significant association of early spontaneous preterm birth with the evolutionarily selected variants. To reconstruct its evolutionary trajectory on the human lineage, we observed substantial differentiation between modern and archaic humans at the PGR locus, including fixation of a deleterious missense allele in the Neanderthal genome that was later introgressed in modern human populations. Taken together, our study revealed substantial evolutionary innovation in PGR even during very recent human evolution, and its different forms among human populations likely result in differential susceptibility to progesteroneassociated disease conditions including preterm birth.

### **Bibel**

## RÖMER 2018

Thomas Römer, Homosexuality in the Hebrew Bible? Some Thoughts on Lev 18 and 20; Gen 19 and the David-Jonathan Narrative. In: Manfred Oeming (Hrsg.), Ahavah, Die Liebe Gottes im Alten

Testament. Arbeiten zur Bibel und ihrer Geschichte 55 (Leipzig 2018), 213–231.

No text of the Hebrew Bible (and also no text of the New Testament speaks about homosexuality as a social phenomenon to describe loving and sexual same sex relations. As a result one has to seriously question the use of different biblical texts in contemporary and ecclesial debates. Texts like Leviticus 18 and 20 reflect the understanding of gender in the Ancient Near East, as well as a view of sexuality, that is exclusively concerned with procreation. Genesis 19 and Judges 19 denounce sexual violence and do not offer a theory of homosexual fornication. In the story of David and Jonathan we find an erotically tinted loving relationship between men. This story has to be related to Epic of Gilgamesh and here too one has to avoid anachronistic interpretations. When we explore biblical concepts of Eros and sexuality, the narrative of 1 Samuel 18 – 2 Samuel 1 should however not be ignored.

# Grabung

### WIERER 2018

Ursula Wierer et al., The Iceman's lithic toolkit, Raw material, technology, typology and use. PLoS ONE **13** (2018), e198292. DOI:10.1371/journal.pone.0198292.

Ursula Wierer, Simona Arrighi, Stefano Bertola, Gu" nther Kaufmann, Benno Baumgarten, Annaluisa Pedrotti, Patrizia Pernter & Jacques Pelegrin

The Tyrolean Iceman, a 5,300-year-old glacier mummy recovered at the Tisenjoch (South Tyrol, Italy) together with his clothes and personal equipment, represents a unique opportunity for prehistoric research. The present work examines the Iceman's tools which are made from chert or are related to chert working dagger, two arrowheads, endscraper, borer, small flake and antler retoucher – and considers also the arrowhead still embedded in the shoulder of the mummy. The interdisciplinary results achieved by study of the lithic raw material, technology, use-wear analysis, CT analysis and typology all add new information to O" tzi's individual history and his last days, and allow insights into the way of life of Alpine Copper Age communities. The chert raw material of the small assemblage originates from at least three different areas of provenance in the Southalpine region. One, or possibly two, sources derive from outcrops in the Trentino, specifically the Non Valley. Such variability suggests an extensive provisioning network, not at all limited to the Lessini mountains, which was able to reach the local communities. The Iceman's toolkit displays typological characteristics of the Northern Italian tradition, but also comprises features typical of the Swiss Horgen culture, which will come as no surprise in the toolkit of a man who lived in a territory where transalpine contacts would have been of great importance. O" tzi was not a flintknapper, but he was able to resharpen his tools with a medium to good level of skill. Wear traces reveal that he was a right-hander. Most instruments in the toolkit had reached their final stage of usability, displaying extensive usage, mostly from plant working, resharpenings and breaks. Evidently O" tzi had not had any access to chert for quite some time, which must have been problematic during his last hectic days, preventing him from repairing and integrating his weapons, in particular his arrows. Freshly modified blade tools without any wear suggest planned work which he never carried out, possibly prevented by the events which made him return to the mountains where he was killed by a Southern Alpine archer.

# Religion

### **NIGRO 2017**

Lorenzo Nigro, Beheaded Ancestors, Of Skulls and Statues in Pre-Pottery Neolithic Jericho. Scienze dell'Antichità **23** (2017), iii, 3–30,633.

More than a hundred years of excavations at Tell es-Sultan, the ancient Jericho in Palestine, in addition to bringing to light the remains of one of the most ancient cities of the Levant in the Bronze and Iron Ages, contributed in an extraordinary way to the knowledge of the Neolithic period, when the human communities in the Fertile Crescent developed a new social and economic model with the introduction of agriculture and animal breeding. Jericho was, in particular in Pre-Pottery Neolithic (10.500–6000 BC), a guiding site not only for cultural growth, but also for the ideological conception that supported the achievements of the "agricultural revolution". Among the most representative testimonies of this period are 45 skulls, fourteen of them modeled in plaster, and some anthropomorphic statues found by the two British expeditions that succeeded one another in the twentieth century and by the Italian-Palestinian Expedition of Sapienza University and the Palestinian Ministry of Tourism and Antiquities for twenty years (1997–2017). The article focuses on the contexts of discovery of these first images, as well as on the rituals related to their production, use and their possible meanings.