JOURNEY OF MAN by SPENCER WELLS – KEY TERMS / CONCEPTS

- Luigi Luca Cavalli-Sforza: famous geneticist who collected DNA in blood samples from around the world.
- A small band left Africa some 50,000 years ago. They were the San people (Bushman).
- Khoisan people: Eyes, High Cheek bones like Asians, medium brown skin that can go darker or lighter. Faces look like a composite of everyone.

DNA - A C G T
- Glitches = mutations are passed on.
- Inherited mutations are known as markers.
- Markers on the Y chromosome.
- Man pass on y chromosomes to sons.

Why did the San leave Africa?
A drought occurred. A drop in temp, the sea receded – all about 72,000 years ago.
Ice cores, marine cores (forams = foraminifera: little creatures looking like little grains of sand, calcium carbonate can measure the isotopes). They reveal that the ice caps were expanding: an Ice Age.
Pastureland became desert and people needed to look for new places to find food. The lifeline: a small band left Africa. They first went to Australia.

AUSTRALIA
- Aborigines: famous for oral history. They have song lines.
- Aborigines believe that they always came from Australia.
- Rock paintings in Queensland do not show evidence of a journey.
- Africans have no trace of Aboriginal markers in their blood, while Aborigines do have African markers in their blood.
- Theory: The Africans followed a coastal route on the edge of the ice field through India and into Australia. Later, the ice left hiding the land route taken.

INDIA
- Looking for the genetic marker found in the Aborigines that show the Aborigines travelled through India
- It occurred around 2000 generations ago. (40,000 years ago).
- There was no archeological evidence in India of humans till 35,000 years ago. But the DNA is pointing to 50,000 years ago.
- This migration accounts for 10% of the world's population.

The second wave becomes Europeans, Native North Americans, Asians. THIS GROUP WENT TO THE MIDDLE EAST

- There was no ice in Africa, but there was a drought. The animals leave and go into the Middle East.
- One branch went back down into INDIA
- Another second wave went to CHINA.
- There were no people in Europe at this time while the Asians were populating their area.
- It took 10,000 years to get to Europe from the Middle East.
- Cromagnon was a new human roaming in the area. Where did Cromagnon, a European, come from? He came from the Ice Age. They toughened up along the way.
- Cromagnon arrived with African body proportions.
- Naked skin sweats to keep cool. Skin was dark, full of melanin. Skin was lightening because the skin needed vitamin D3. Populations that were not coastal populations had to lighten up. On the coast if you ate fish, you could stay a little darker. In Europe, being covered with skins, the skin is less exposed. The skin that is exposed has to do more work to synthesize Vitamin D. The nose, height and hair changed.
**Why 10,000 years from the Middle East?**  They did not go directly to Europe. They went to **KIRGUISTAN**

- The markers found here are the same as those found in males in Europe.
- They followed the animals who went along the grasslands to the central Asian country.
- Same markers in North and South America: Central Asia was the nursery of Mankind; Africa was the cradle of Mankind.
- Nyazov = holds the marker and is the link to all **Europeans, North and South Americans, Asians, Russians, and some went back into India.**
- Ice Age 20,000 years ago was at its peak, and that’s when Nyazov’s relatives headed to Eastern Russia.

**CHUKCHI**

- These people populated the Americas. The Native Indians and Inuit come from these people. Average height is 5” 6’ or so.
- Bergman’s and Allen’s rules: Length of appendages are reduced. Shorter and rounder trunk. Little furnaces for preserving their own body heat. They must stay physically active.
- They have a herd of 1,000 reindeer. These people live on the reindeer.
- This is a good look at what an Ice Age looked like. Yet, the Chukchi show how people can survive an Ice Age.
- The Chukchis ancestors followed the reindeer.

**BEARING STRAIGHT (Get it?)**

- About 15 000 years ago, at the height of the last Ice Age, the ancestors of the Chukchi left Russia and went over to North America.
- The land route was called Beringia connected the Russian far east to Alaska.
- The reindeer went over this land crossing, and the Chukchi followed.
- They walked down a corridor that offered easy passage between two major ice floes into North and South America.

**NAVAJO**

- Canyon Duché (holy site for the Navajo)
- Creation and migration narrative - "At the time of the beginning": They believe that they were birthed into this place. They came up from the earth.