Mapping marijuana’s genome could lead to medical discoveries

The history of marijuana is being mapped in Portland, Ore. For 10,000 years, humans have carried this plant everywhere, but we still know astonishingly little about it. For the first time, its genetic lineage is being mapped; this means not only helping develop cures for disease, but also determining the tenor of your high with scientific certainty.

Mowgli Holmes, chief scientific officer at Phylos Bioscience, leads a team that is tackling a maze of crossbreeding and landraces, strains that were isolated in specific regions and adapted accordingly. Samples are culled and drawn from every available source.

“We’re testing everything we possibly can,” says Holmes, a molecular geneticist who has a doctorate in microbiology from Columbia University. “We’re testing samples from jars pulled directly off the shelf from a shop in Ohio, in 1937, after prohibition went into effect. The pharmacist stashed them away in his attic.”

So far, the Phylos Bioscience team has sequenced more than 1,000 samples of modern cannabis hybrids, most of which are pulled from dispensaries around the world.

Now, the oddities are rolling in. There is the Ohio collection, an assortment of bottles, pills and gooey concoctions pulled directly from shelves in the early 20th century. There are Thai landraces to study, sterilized seeds from collections and museums across Europe, Russia and China.

Read full, original article: Green Genes