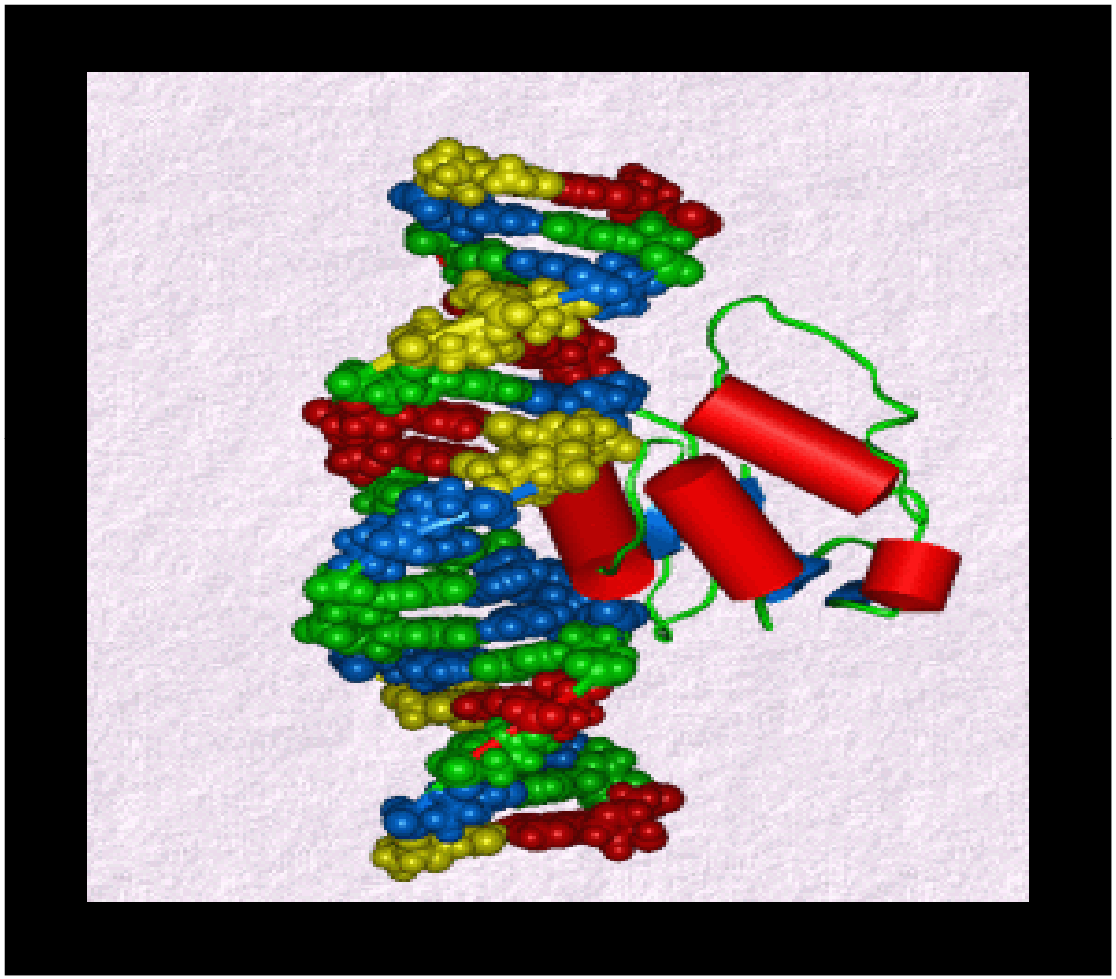
Restriction Enzymes

Heparan**ase** = enzyme



Problem: Is heparanase important in bone development?

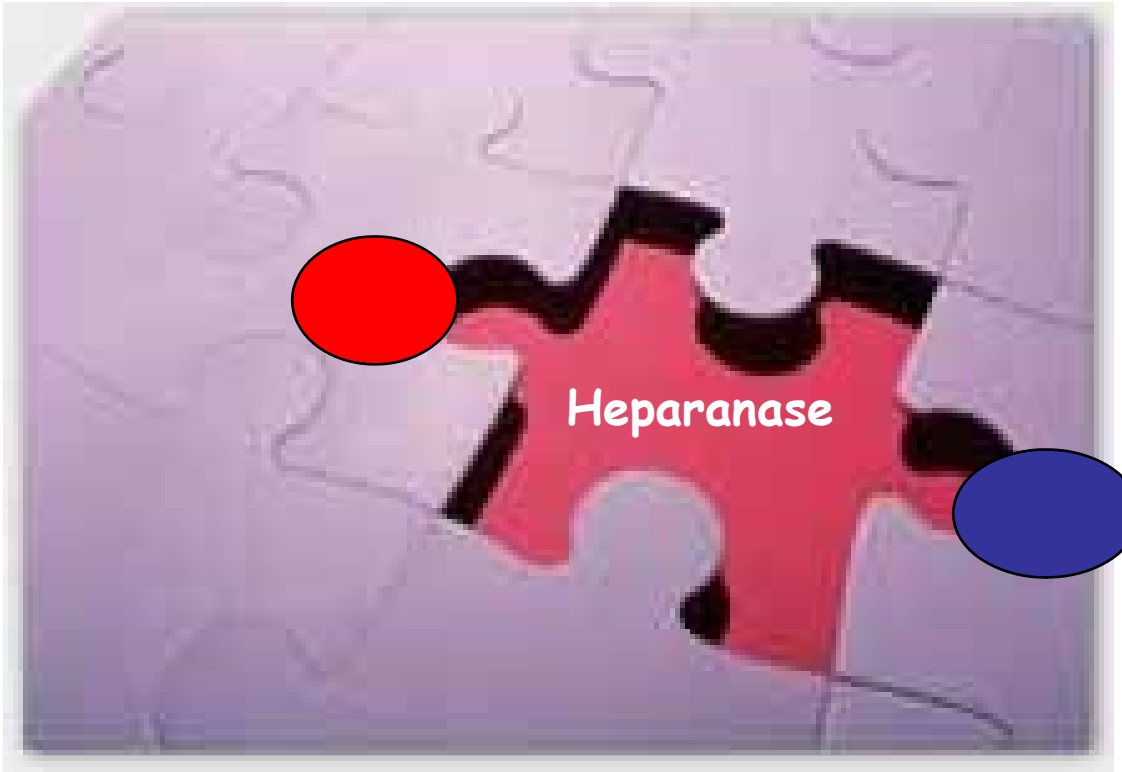
Hypothesis: If heparanase is overexpressed, then bone formation will abnormal.

One way to find out, make a **transgenic** (can be an animal or plant that has a copy of the original gene which can be passed to offsrping) **mouse** that **overexpresses heparanase only** in the **bones**

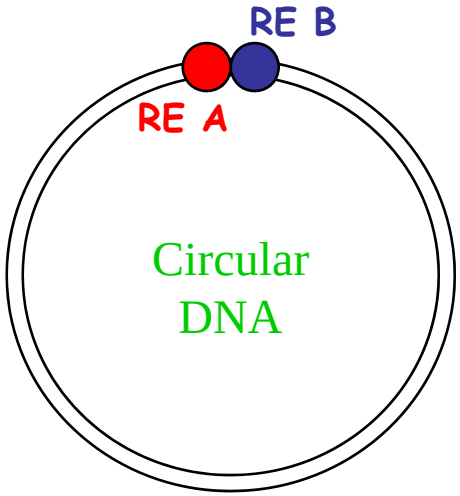
Nucleotides recognized by NotI

Nucleotides recognized by ClaI

Restriction Enzymes

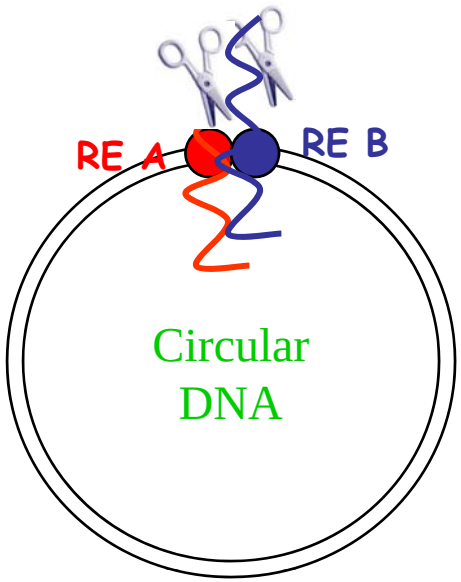


1.



Before Restriction Enzyme Digestion

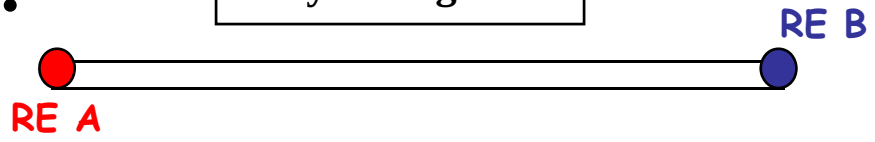
2.



WithRestriction Enzyme Digestion

3.

After Restriction Enzyme Digestion



Linearized DNA

Agarose Gel:
allows one to visualize DNA