Match... eliminate... identify.

Humans and algae share many genes for basic functions and essential structures, including some genes that go into cilia and basal bodies. Basal body

Cilia perform important functions in both multicellular organisms and single-celled organisms.

CTCAGTCGGCTCAAGCCCCTAAGAGAATGCC

Scientists used a computerized comparison to identify human-algal gene matches, then eliminated all matches found in a land plant that doesn't have cilia or basal bodies.

Algae

TCAG TCGGCTC AAGCCCCT GAAGAAGAA TGCCCTCAGA TGGTGCTCTGA

Humans

Washington University in St. Louis School of Medicine

Fall 2004 **Outlook** outlook.wustl.edu

Plants